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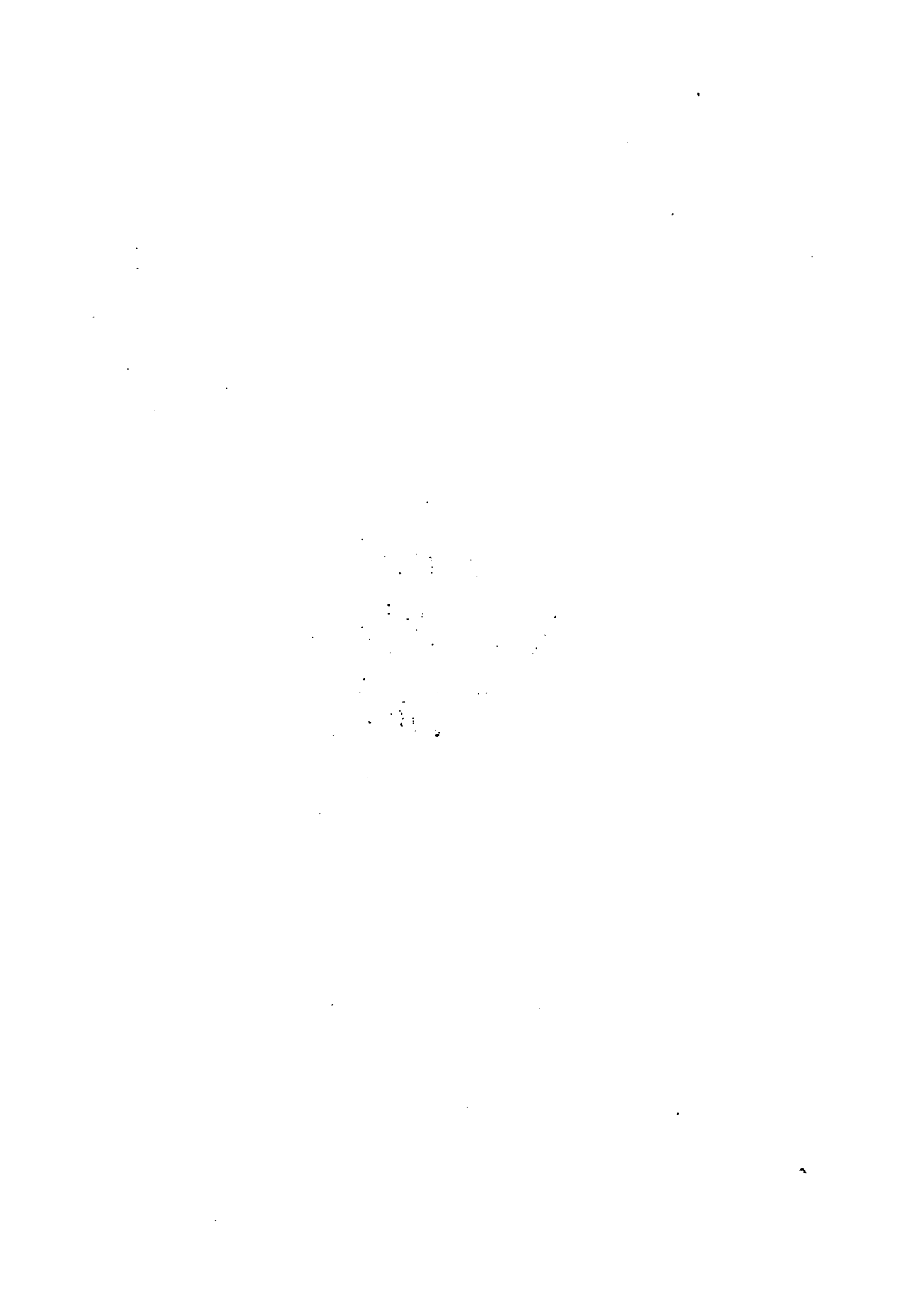


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THE
HISTORY OF MONEY IN AMERICA

FROM THE EARLIEST TIMES TO THE ESTABLISHMENT
OF THE CONSTITUTION

BY

ALEXANDER DEL MAR

FORMERLY DIRECTOR OF THE BUREAU OF STATISTICS OF THE UNITED STATES OF AMERICA;
MINING COMMISSIONER TO THE MONETARY COMMISSION OF 1876; AUTHOR
OF A "HISTORY OF MONETARY SYSTEMS," "THE SCIENCE OF
MONEY," "THE POLITICS OF MONEY," ETC.

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INTRODUCTION.

THE monetary systems of the present day are an historical development; they descend from the principles enunciated in the great *Mixt Moneys* case of 1604, the circumstances connected with the Spanish Conquest of America; the Spanish Free Coinage Act of 1608, the British Free Coinage Act of 1666 and the invention of the coinage and printing presses. It would therefore seem necessary that writers on the subject should possess some familiarity with these topics. But though the author of the present work has consulted many treatises relating to monetary systems he has never yet met with one which evinced the least grasp of these various historical elements. Some of them contain information relative to the details of monetary issues. These, when carefully collated, are of value to the historian and commentator. But for the most part books on money are filled with doctrines, or worse yet, mere dilutions of doctrines, without history or experience to support them; doctrines based on words, on definitions, on figments of the mind, false, worthless, misleading, mischievous and hurtful.

The legal, political and social character of Money; its influence upon the public welfare; the prominent place it has occupied in the annals of the past; the countless experiments that have been made in the fabrication and emission of its symbols; the civic struggles that have centred upon its control; and the learning that has been devoted to its principles by philosophers, legislators and jurists, surely claim for its historical treatment some better preparation than doctrines. The Father of the Inductive method was born more than three centuries ago; yet it is only now that his method is being applied to the study of Money.

I.—The *Mixt Moneys* case decided that Money was a Public Measure, a measure of value, and that, like other measures, it was necessary in the public welfare that its dimensions or volume should be limited, defined and regulated by the State. The whole body of learning left us by the ancient and renescent world was invoked in this celebrated dictum: Aristotle, Paulus, Bodin and Budelius were summoned to its

support; the Roman law, the common law and the statutes all upheld it; "the State alone had the right to issue money and to decide of what substances its symbols should be made, whether of gold, silver, brass, or paper. Whatever the State declared to be money, was money." That was the gist of it. (For a full account of this famous case, see the author's "Science of Money," ch. iv.)

This decision greatly alarmed the merchants of London, and for more than half a century after it was enunciated they were occupied with efforts to defeat its operation. In 1639 they succeeded in getting the matter before the Star Chamber; but their plans were rejected. The Revolution of 1648 postponed their projects. The Restoration of 1660 revived them. Their final success dates from 1666. Meanwhile other things had happened.

II.—In the contracts which it made with Columbus, Cortes, Pizarro, De Soto and the other commanders whom it sent forth to discover or plunder America, the Crown of Spain always stipulated that the Quinto—one-fifth—of the spoil should be reserved for the king. The remainder, if of gold or silver, might then be melted down and stamped with its weight by public officials and then shipped to Spain for coinage. At each step of these operations the Crown exacted a fresh tax, seigniorage, *derecho*, *haberia*, etc., so that by the time the plunderer or miner got back his metal, one-third to one-half of it had found its way into the royal coffers. The delay and risk of shipment to Spain supported a clamour for Colonial coinage and Colonial coinage resulted in an agitation to abolish all coinage fees except the Crown's Quinto: an agitation which ended in securing the "free" coinage edict of 1608. Under this edict all gold and silver which had paid the Quinto on acquisition or production, was required to be coined by the Royal officials for private individuals free of charge and without limit. The granting of such a privilege bespeaks the employment of coining machinery, for the Crown could hardly have afforded it so long as coins had to be made by hand. As a matter of fact coining machinery was employed in Italy and Spain about the middle of the 16th century.

III.—Before the Crown of Spain proclaimed "free" coinage for Quinto-paid metal in America, much of the metal plundered from the natives or acquired through the *repartimento* system, of which more anon, was smuggled out of the Colonies and found its way to Holland, France and England. With "free" coinage in Spanish America this movement slackened, and this cessation of the illicit trade in the precious metals furnished a pretext to the London merchants for re-

newing their demands upon the Crown for gratuitous and unlimited coinage. But their main argument was supplied by the East India Company, who were anxious to ship silver to India in exchange for gold, a transaction that at that time afforded a profit of cent per cent. Behind this argument there was bribery of the court officials, of the king's mistress, Barbara Villiers, and even of the king (Charles II.,) himself. After several years of intrigue, the merchants finally succeeded; and in 1666 was enacted that "free" coinage law which practically altered the monetary systems of the world and laid the foundation of the Metallic theory of money. The specific effect of this law was to destroy the Royal prerogative of coinage, nullify the decision in the *Mixt Moneys* case and inaugurate a future series of commercial panics and disasters which down to that time were totally unknown.

IV.—The Spanish Crown rewarded its Conquistadores and their followers not with grants of land in America but with grants of Indians, nominally as vassals, but practically as slaves. These grants were called *repartimientos*, afterwards *encomiendas*. They virtually awarded to the grantee the right to seize upon a specified number of the natives and compel them to produce gold and silver for nothing. Millions of lives were thus granted away and millions of ducats were the result; but besides the lives they cost, these millions cost nothing to the Spaniards, whose acquisitions of the precious metals, whether by plunder or through their *repartimientos*, had therefore no relation to that "cost of production" which forms the fallacious basis of the Metallic theory.

V.—It has been already intimated that coining machinery was employed in Italy and Spain during the 16th century. Evelyn, in his work on *Medals*, asserts that Jerome Cardon, who died in 1576, described a coining press used in the Venetian mint, "which both stamped, cut and rounded money by one operation only." This device is also mentioned by Benevenuto Cellini, who died in 1570. Previous to the invention of coining machinery, an ordinary workman could turn out not more than 40 or 50 coins a day. With the laminating-mill and screw-press, which was employed in Spain so early as 1548, he could turn out several thousand coins a day. These labour-saving machines entirely changed the relations of Money to exchange and society; a revolution which was still further advanced by the application of the printing press to the issues of Money, the earliest examples of which, within the scope of the author's researches, were the pasteboard (embossed) dollars of Leyden issued in 1572.

VI.—The invention of coining machinery had still another important consequence: it multiplied counterfeits, not necessarily base coins, but forged coins containing as much or more fine metal than the genuine ones; but metal that had not paid the Quinto. In 1569 Phillip Mastrelle, who brought a coining press from France into England, was detected in making coins on his own account, an offense for which he was executed. Fénelon states that in 1574 certain Germans, Hollanders and Frenchmen, in England, were detected in forging a million crowns of the coins of France, Spain and Flanders; and that this was done as a political measure, with the connivance of some of the ministers of Queen Elizabeth. The Marquis de Tavannes assures us that Salcede, who was executed at Paris in 1582 had grown rich from the profits of what he termed forgery, but what, according to the Metallic school, was really only justifiable private coinage; because the forged coins contained more silver than the genuine. These offenses could only have been profitable when committed with the aid of coining machinery, whose influence upon exchange and society must have become in this manner greatly augmented. (“Barbara Villiers,” p. 18.)

With this brief Introduction the author commends his book to the indulgent public. Should his health permit, it will be followed by the “History of Money in America, from the Adoption of the Constitution to the present time,” and this will form the last of a series of monetary histories, which, commencing with a History of the Precious Metals, and followed by a History of Monetary Systems, now embraces all the principal States of the world, both ancient and modern.

BIBLIOGRAPHY.

The following list of books is to be read in connection with the lists published in the author's previous works. The numbers at the end of each title are the press marks of the British Museum library.

- ABBAY (Richard). Restoration of the Ancient System of Tank Irrigation in Ceylon. Printed in the London "Nature" of Oct. 11, 1877.
- ABU MASHAR (*See* ALBUMAZAR).
- ACHERY (Luke D'). Spicilegium; sive collectio veterum aliquot scriptorum qui in Gallie bibliothesis delituerant. Paris, 1723, 3 tom. fol. 10. e. 1-3.
- ADAM OF BREMEN. Historia Ecclesiastica ejusdem auctaris libellus de situ Daniæ, 1706, fol. 158. h. 14.
- ADAMS (Alexander), *Rev.* Roman Antiquities, 18th ed., Edinburgh, 1854, 8vo.
- (This popular work was originally published in 1791, and has passed through numerous editions, both in England and America. It omits or conceals much more than it discloses concerning the religious belief and ceremonies of the Romans, and must therefore be consulted with discretion.)
- ALBIRUNI (Mohammad Ibn Ahmad). Chronology of Ancient Nations. Trans. by C. E. Sachau. London, 1879, 8vo. 752. l. 24.
- Institutes and Customs of India in the eleventh century. Trans. by C. E. Sachau. London, 1888, 2 vols. 2318. h. 4.
- ALBUMAZAR (Jafar Ibn Muhammad, commonly known as Albumazar, Albumasar, or Albumashar). Flores Astrologie. Trans. from the Arabic by J. B. Sessa, Venice, 1485, 4to. 718. f. 2. (2.)
- ALISON (Archibald), *Rev.* "Essays," political, historical and miscellaneous. London, 1850, 3 vols, 8vo.
- ALLEN (John), *Master of Dulwich College.* Inquiry into the Growth of the Royal Prerogative in England. London, 1849, 8vo. 2238. e. 1.
- (A short performance, whose reputation exceeds its merit. It holds that "homage" is a custom derived from the ancient Germans; that modern sovereigns add to their titles, "by the grace of God," because the Saxon hlaford was sacred to the churl; and that the king, instead of the Augustus, is the Fountain of Honour. The author has advanced no evidences to support these assertions.)
- ALLMER (A). Les Gestes du Dieu Auguste d' apres l' inscription du Temple d' An-cyre. Vienne, 1889, 8vo. 7705. ee. (17.)
- ALVIELLA (*See* GOBLET.)
- AMERICA. Recopilacion de Leyes de los Reynos de las Indias. Madrid, 3d edicion, 1774, 4 tomos, fol.
- ANTHROPOLOGY. Journal of the Anthropological Society of Bombay. Vol. II, pp. 164-224. Fawcett on "Festivals to Village Goddesses." London, 1886, 8vo. Ac. 6242.
- ARATUS (of Soli). The Phænomena and DiOSEMEIA, trans. by J. Lamb. London, 1848, 8vo. There is another trans. by J. H. Voss. 1348. c. 9.
- ARISTOTLE. Works. Trans. by T. Taylor, London, 1812, 9 vols., 4to. 2052. h.
- ARRIAN (Flavius). The Anabasis of Alexander; literally trans. by E. J. Chinnock, London, 1884, 8vo. 9026. ff. 18.
- Voyage round the Euxine sea. Tr. W. Falconer, Oxford, 1805, 4to. 200. e. 18.
- Voyage of Nearchus and Periplus of the Erythræan sea. Gr. with Eng. Trans. by W. Vincent, Oxford, 1809, 4to. 570. g. 16.
- ASHLEY (W. J.) Essay on Feudalism. London, 1887, 8vo.
- ATWOOD (William). *Barrister at Law and Chief Justice of New York.* Fundamental Constitution of the English Government. London, 1690, fol.
- AURELIUS VICTOR (Sextus). De origine gentis Romanæ, 1826, 8vo. Origine du Peuple Romaine, a French translation of the same work, by N. A. Dubois. 11,306. K. 9.

- AYLIFFE (J.)** *Rev.* A new Pandect of Roman Civil Law. Vol. I. (The only volume published). 1734, fol. 500. g. 14.
- BAILLY (Jean Sylvain)**. Histoire de l'Astronomie ancienne depuis son origine jusqu'à l'établissement de l'École d'Alexandrie, 2nd ed., Paris, 1781, 4to. 8562. e. 14.
 ——— Traite de l'Astronomie Indienne et Orientale. Paris, 1787, 4to, 59. h. 5.
 ——— Ancient History of Asia; a series of letters to Voltaire. London, 1814, 8vo. 1137. b. 21, 22.
- BALUZE (Etienne)**. Histoire des capitulaires des Rois François de la première et seconde race. Paris, 1779, 8vo. 708. a. 12.
- BANQUERI (Josef Antonio)**. Libro de Agricultura, traducion de Abn Lakariya. Madrid, 1802, 2 vols, fol. 441. i. 2. 3.
- BAUER (Bruno)**. Christ und der Cæsaren, Berlin, 1879, 8vo. 4534. cc. (7.)
- BEAL (Samuel)** *Rev.* Buddhist Travels in the West. London, 1890, 2 vols, 8vo.
- BEAUSOBRE (Isaac de)**. Histoire Critique de Manichéè et du Manichéisme. Amsterdams, 1734-9, 2 vols, 4to. 678. e. 11-12.
- BECK (Ludwig)**. Die Geschichte der Eisens. Brunswick, 1884, 8vo. 7104. d.
- BEDE**. Ecclesiastical History of England and Anglo-Saxon Chronicle. Trans. by J. A. Giles, London, 1847, 8vo.
- BELL**. Historical Studies of Feudalism, 1852.
- BELON (Peter)**. Travels. Trans. by J. Ray, 1693, 8vo. 978. g. (1.)
- BELOT (E.)** De la revolution economique à Rome au millieu du IIIe siecle, A. C. Paris, 1885, 8vo. 8226. eee. (24.)
- BENJAMIN OF TUDELA**. Itinerary; Heb. with Eng. Trans. by A. Asher, London, 1840-1, 12mo. 1938. c. 11.
- BENTLEY (John)**. Hist. Rev. of the Hindu Astronomy. London, 1825, 8vo. 531. i. (21.)
- BERNARD (Jacques)**. Recueil de Traitez de Paix de Treve, etc., de A. D. 536, jusqu'à A. D. 1700. Amsterdam, 1700, fol. 589, i, 8.
- BEUDOIN**. Etude sur les origines du regime feodal. Grenoble, 1889, 8vo. 6005. f. 4. (1.)
- BEZOLD (Carl)**. Oriental Diplomacy. London, 1893, 8vo. 7704. aaa. 54.
- BHAGAVAT-GITA**; known also as Christna's Gospel, the Divine Song, Christna's Revelation, etc. Trans. from Sanscrit into English, by Sir Charles Wilkins. London, 1785, 4to. 14060. f. 1.
- BIRCH (Samuel)**, (formerly of the British Museum.) Records of the Past; being English translations of the Assyrian and Egyptian monuments. London, 8vo, Old Series, in 12 vols., 1873-81; New Series, in 4 vols., 1880-92. 2258. a. 3.
 This work is published anonymously. The late Dr. Birch's name is attached to it in the catalogue of the Museum Library, but does not appear in the title page of the work. On the other hand, the name which does appear there is that of the editor, not the author. It is printed under the sanction of the Society of Biblical Archæology.
- BLACK (W. H.)** The Calendar of Palestine reconciled with the Law of Moses, against the theory of Michaelis. London. 1865, 8vo. 4372. g. 18 (9.)
- BLANCHET (J. Adrien)**. Nouveau manuel de numismatique du Moyen Âge et moderne. With Atlas. 1890, 2 tom, 8vo. 12208. b.
- BLAVATSKY (Helena Petróvna)**. Isis Unveiled. New York, 1877, 2 vols, 8vo. 2212. c.
- BOECKH (Augustus)**. Corpus Inscriptionum Græcorum, Berlin, 1828, 4 vols, fol. Catalogue Desk. K.
- BOISSIER (Gaston)**. La religion Romaine d'Auguste aux Antonines. Paris, 1874, 8vo. 2212. g.
- BONWICK (James)**. Egyptian Belief and Modern Thought. London, 1878, 8vo, 2212. b.
- BOUCHÉ LECLERC (A.)** Les Pontiffes de l'ancienne Rome; etude historique sur les institutions religieuses de Rome. Paris, 1874, 8vo., pp. 435. 4506. d. (1.)
- BOULAINVILLIERS (Count Henri de)**. Histoire de l'ancien gouvernement de France, Amsterdam, 1727, 12mo. 897. a. 14.
 ——— History of the ancient Parliaments of France. Translated from the French by C. Forman, London, 1754, 2 vol., 8vo. 5424. c.
 ——— The Life of Mahomet. Trans. into Eng. London, 1752, 12mo.
 ——— Etat de la France. London, 1727, 2 vols, 8vo. 1857. a.
- BOWER (Archibald)**. History of the Popes. Dublin, 1749-68, 3 vols, 8vo. 4855. bb.
 ——— Another ed. Phila., 1844-5, 3 vols, 8vo. 4855. e.
- BOWKER and ILES (R. R. and Geo.)** Reader's Guide in Economic, Social and Political Science. New York, 1891, 8vo. 11,900. bb. 54.

- BRADY (John).** *Clavis Calendaria, or a compendious analysis of the Calendar.* London, 1815, 2 vols, 8vo. 11,099. b. 1.
- BRAMSEN (W.)** *Japanese Chronological Tables.* Tokio, 1880, 8vo. 11,099. b. 1.
- BRANTOME (Pierre de Bourdailles).** *Seigneur de Brantome. Memoirs.* Leyde, 1722, 12mo. 630. a. (25.)
- Another ed. Paris, 1876, 12mo. 8415. df. (2.)
- BREREWOOD (Edward),** *Rev. De Ponderibus et pretiis veterum nummorum, etc.* (Edited by R. B.) 1614, 4to. 602. e. 19. (2.)
- BRITANNICA.** *Monumenta Historica.* (Passages in classical authors relating to Britain.)
- BROWN (Alex.)** *F. R. H. S.* *The Genesis of the United States . . . movement in England 1605-16, which resulted in the plantation of North America, etc.* London, 1890, 2 vols, 8vo. 9602. i. (1.)
- BRUCE (J. Collingwood,)** *Rev. The Roman Wall; a description of the Mural Barrier of the North of England.* London, 1867, 4to. (Chiefly a description of Severus', properly Hadrian's Wall and the antiquities found in the vicinity.) 2258. f.
- BRUCE (Philip Alex.)** *Economic History of Virginia in the 17th Century.* London, 1896, 2 vols, 8vo. 9605. c. (22.)
- BRUGSCH (Heinrich),** *History of Egypt.* Trans. by Philip Smith. London, 1881, 2 vols, 8vo. 2069. a.
- BRUNNEMANNUS.** (*See Justinian.*)
- BRYANT (Jacob).** *Ancient Mythology.* 3d ed. London, 1807, 6 vols, 8vo. 86. f. 11-16.
This work is an elaborate effort to reconcile all the myths, in which effort it fails; not, however, without incidentally furnishing a large fund of valuable information.
- BRUCE (James).** *The Holy Roman Empire.* 4th ed. London, 1873, 8vo.
- BRYDONE (Patrick).** *Sicily and Malta.* London, 1776, 2 vols, 8vo. 10,151. d. 21.
- BUCHANAN (George),** *The historian.* *See Macfarlan.*
- BUCKMAN and NEWMARCH.** *Illustrations of the Remains of Roman Art in Cirencester,* by Prof. Buckman and C. H. Newmarch. London, 1850.
- BURIGNY.** (*See Levesque.*)
- BURKE (Luke).** "The Principles of Mythonomy", (Laws of Mythology, Systems of Zodiacs, etc.) "Hebrew Chronology", "Egyptian Chronology", "Discovery of America, by the Northmen", etc.; a number of articles on these and kindred topics published in the *London Ethnological* for 1848, 1854, and 1865-6, these being the only years of its publication. 8vo. PP. 3862. a. and 295.
- CALLIMACHUS.** *Hymns, Epigrams, etc.* Trans. by Revd. J. Banks. Bound with Hesiod. London, 1856, 8vo. 2500. f.
- CANDOLLE (Alphonse de).** *Histoire des Sciences et des savants depuis deux siecles, suivre d'autres etudes . . . en particulier sur la selection dans l'espece humaine.* Geneve, Bale, Lyon, 1873, 8vo. 8707. ee. (15.)
- CAPELLA (Martianus Mineus Felix).** *De Nuptiis Philologiae et Mercurii.* (On the accord of Bacchus and the Logos). Ed. Kopp, Frankfort, 7836, 4to. 718. i. (25.)
- CAREW (George),** *Sir. Pacutu Hibernia, or History of the late wars of Ireland under Sir George Carew and compiled by his direction.* 1663, fol. 186. d. (8.)
- History of Ireland. 601. m. 6.
- Letters to Sir Thomas Roe. Ac. 8113-71.
- CAREW (George),** *Earl of Totness.* *Report of the Master of the Rolls upon the Carte and Carew Papers.* 1864, 8vo. 2075. c. 1.
- Calendar of the Carew MSS. 1867, 8vo. 2075. c.
- CARLILE (Richard),** *The Deist; containing theological Essays by Baron de Holbach, Voltaire, and others.* London, 1819-20, 2 vols, 8vo. 4015. f.
- CARANZA (Alonso).** *El ajustamento y proporcion de las monedas de oro, plata y cobre, y la reducion distros metales, etc.* Madrid, 1629, fol. 504. g. (6.)
- CATON (W.)** *Abridg. of the Chronol. of Eusebius.* London, 1661, 12mo. 4530. aa.
- CHARTON (Edouard).** *Voyageurs, anciens et modernes.* Paris, 1854, 4 vols, in 2, 8vo. 2060.
- CHRISTNA (Isvara),** *The.* Trans. by H. T. Colebrooke, Oxford, 1837, 4to. 752. l. 1.
- CHRISTNA.** (*See Christna's Gospel, or the Bhagavat-Gita.*)
- CHURCHILL (Chas. Henry.)** *Mount Lebanon.* London, 1853, 3 vols, 8vo. 10,075. d.
- The Druzes and the Maronites. London, 1862, 8 vo. 10,075. d.
- CLARKE (Edward),** *Rev. Letters concerning the Spanish Nation (including Coins).* London, 1763, 4to. 179. d. 18.

- CLARKE (G.) "Pompeii." London, 1831, 2 vols, 12mo. 1157. a. 21-2.
- CODEX ARGENTEUS. Quator D.N. Jesu Christi evangeliorum, versiones per antiquæ duæ Gothica scilicet et Anglo-Saxonica: Quarum illam ex celeberrimo Codice Argenteo nunc primum depromsit, Franciscus Junius F. F. hanc autem ex codicibus mss. collatis emendatiùs recudi curavit, Thomas Mareschallus, Anglus, etc. Dordrecht, 1665, 4to. 218. g.
- COLEBROOKE (Henry T.) Miscellaneous Essays, containing "Religious Ceremonies of the Hindus." London, 1873, 3 vols, 8vo. 14085. e. 6-8.
- COLUMELLA (L. J. M.) Husbandry; in XII Books. French trans. by Nisard; Eng. trans. by M. C. Curtius. London, 1745, 4to. 34. d. i.
- CONSTITUTION and Present State of Great Britain. (See GREAT BRITAIN.)
- COOTE, The Romans in Britain, London, 1878, 8vo. 2394. e.
(A work of merit, the materials being chiefly drawn from the Roman laws relative to land and the archæological remains of Britain.)
- CORSINO (Edoardo). Fasti Attici, in quibus Archontum Atheniensium series, Philosophorum, oriorumque Illustrium Virorum ætas, etc. 4tom. Florentiæ, 1744-56, 4to. 673. h. (4.)
- COULANGES (Numa Denis Fustel de), The Ancient City; a study on the religion, laws, and institutions of Greece and Rome. Trans. by W. Small. Boston, 1874, 8vo. 2259. b. (e.)
- The Origin in Property by Land. Trans. by M. Ashley. London, 1891, 8vo. 08276. e. (9.)
- Histoire des institutions politiques de l'ancienne France. Paris, 1891-2, 6 vols. 8vo. 2390. d.
- COUTZEN (Adamus). Politicorum libri decem in quibus de perfectæ reipubl. forma, virtutibus et Vitiis, etc. Moguntiæ, 1621, fol. C. 24. d.
- The plot of Coutzen the Moguntine Jesuit to cheat a church of the religion established therein and to serve in Popery by Art, etc. London, 1641, 4to. 702. d. 8. (2.)
- CREECH (Thomas). The Five Books of Marcus Manilius, containing a system of the Ancient Astronomy and Astrology, together with the Philosophy of the Stoics. Done into English verse, with Notes. London, 1697, 8vo. (See Manlius and Shirburn for other editions of the Five Books called the Astronomicon.) 11385. b. b.
- CREUZER (George Frederich). Religions d' antiquité refondu, etc., par G. D. Guigniaut, L. F. A. Maury, and E. Vinet. Paris, 1825-51, 4 vols. 8vo. 2212. b.
- CYPRIAN, Bishop of Carthage, A. D. 248-58. Unity of the Church, a Sermon. Trans. by Revd. J. Fell, Bishop of Oxford. London, 1681, 4to. 3805. a.
- DAREMBERG ET SAGLIO. Dictionnaire des Antiquites Grecques et Romaines. Paris, 1873, 2 vols, 4to. In progress: In 1897 it was completed to "E." Cat., Desk I.
- DE SACY. (See SILVESTRE.)
- DEUBER (F. H. A.) Geschichte der Schifffahrt in atlantischen Ozean, zum Beweis das. . der Compass . vor F. G. entdeckt worden sey. Bamberg, 8vo. 1424. c.
- DIDRON (Adolphe N.) Christian Iconography, or the History of Christian Art in the Middle Ages. Trans. by E. J. Millington. London, 1849, 2 vols, 8vo. 2502. b.
- DIETRICHSON (L.) Stavkirker; or an illustrated treatise on the church architecture of Norway. Christiania, 1892, 8vo.
- DIODORUS SICULUS. History. Trans. by G. Booth. London, 1600, fol. 2068. g.
- DION CASSIUS. Rerum Romanarum, libri octoginta, ab Immanuel Bekkero. Greek text. Lipsiæ, 1849, 2 vols, 8vo. 2052. e.
- Histoire Romaine. Paris, 1845-70, 10 tom., 8vo. 1307. i. (12-19.)
- An oration . . . to Octavius Cæsar Augustus, against monarchy, taken out of the XIIth book of Dion. London, 1657, 4to. E. 972. (3.)
- The History of D. C. abridged by Xiphilinus. Done from the Greek by Mr. Manning. London, 1704, 2 vols, 8vo. 293. f. (28, 29.)
- DIONYSIUS of Halicarnassus. Antiquities of Rome. Trans. by Spelman. London, 1758, 4 vols. 4to. 196. b. (1-4.)
- DITTENBERGER (William). Corpus Inscriptionum Atticarum. Berlin, 1878, fol. 2068. g.
- DRUMMOND (W.) Zodiacs of Esné and Denderah. London, 1821, 8vo. 1140. d. 7.
- DU BOS (Jean Baptiste). Histoire Critique de l'establisement de la monarchie Francoise. Amsterdam, 1734, 3 vols, 4to. 182. b. 8-10.
- DU CHOUËL (Guillaume). Religion de los Antiguos Romanos. Traducion en Castellano, por Baltasar Perez. Leon, 1579, 4to.

- DUMONT D'URVILLE. (*See* D'URVILLE.)
- DUNCKER (Max). *History of Antiquity*. Trans. from the German by Evelyn Abbott, M.D. LL.D. London, 1879, 6 vols, 8vo.
- DUPIN (Andre M. J. J.) *Father*. *Manuel du droit public ecclésiastique français*. Paris, 1844, 12mo. 5424. aaa. 5.
- DUPUIS (Ch. Fr.) *Origine de tout les Cultes*. Paris, 1794, 3 vols, 4to. Plates. 483. a. 1-7 & 484. c. 22.
- Another ed. 7 v., 8vo. Plates. Paris, 1795. 483. a. 1-7 & 484. c. 22.
- An abridgment of the same. Paris, 1822, 12mo. 4503. a. 33.
- On the connection of Christianity with Solar worship. London, 1793, 8vo. An abbreviated edition of the above work, 1877, 8vo. 8632. ccc. 4. (4.)
- DUREAU DE LA MALLE (A. J. C. A.) *Economie Politique des Romains*. Paris, 1840. 2 vols, 8vo. 7702. bb. (7.)
- D'URVILLE (Dumont d'). On the Venus de Milo, contained in an official periodical entitled "Recueil des Lois relatives a la Marine et aux colonies, etc.", edited by M. Bajot. Paris, 1821, 8vo., part II. P.P. 1365.
- DURUY (Victor). *Histoire des Romains*. Nouvelle ed. Paris, 1879, 7 vols, 8vo. 9039. e.
- An English translation by Miss Clarke. London, 1883, 6 vols, 8vo. 2382.g.
- DUTT (Romesh Chunder). *Barrister of the Middle Temple*. A History of Civilization in Ancient India, based on Sanscrit literature. London, 1890.
- DUVERGIER (G. B. Paul). *La Banque Internationale*. Paris, 1865, 8vo. 8227. h. 35. (7.)
- DUVERGIES (Jean Baptiste). *Revue Étrangère (et Française) de legislation, etc.* 1834, etc., tom. 7. P. P. 1275.
- *De l' effet retroactif des lois*. Paris, 1845, 8vo. 5405. d.
- DYER (L.) *Studies of the gods in Greece*. London, 1891, 8vo. 4506. bb. 25.
- EGGLESTON. *English Antiquities*. London, 1847. (*See* Del Mar's "Money and Civilization," p. 31*n* for reference to this work.)
- ELTON. *Origins of English History*, by C. J. Elton. London, 1882, 8vo.
- EUNAPIUS. *Vitæ Philosophorum ac Sophistarum*. Græca, et Latine. 1849, 8vo. 2051. h.
- *Lives of Ancient Philosophers*. 1702, 8vo. 275. g. (8.)
- FABER (Geo. S.) *Origin of Pagan Idolatry*. London, 1816, 3 vols, 4to. 4504. g. 12.
- Though its argument, that all religions sprang from the worship of the earth and moon, may not be convincing, its descriptions of ancient rites and symbols are useful.
- FAWCETT (Fr.) (*See* ANTHROPOLOGY.)
- FERGUSON (Rob't) *River names of Europe*. 1863, 8vo. 12901, c. 24.
- *The Northmen in Cumberland*. London, 1856.
- FIRMICUS (Julius Maternus). *Alleged ara; fourth century*. De Eroro Profanarum Religionum. Printed in the Bibliotheca Patrone at the end of Cyprian. Paris, 1666. The Astronomicorum was printed in 1499, folio, and is bound in the same volume, (Astron. veterus) with the Astronomicum of Marcus Manilius. 715-k.1.
- FISHER and SOETBEER (E. W. F. and A. S.) *Greichische und Romanische Seittafeln*. Altona, 1840, 4to. 584. h. (25.)
- FISKE (John). *Assistant Librarian Harvard University*. *The Discovery of America*, with some account of Ancient America and the Spanish Conquest. Boston, 1892. 2 vols, 8vo. 9551. bb. (13.)
- FOSBROKE (Thos. Dudley). *British Monachism*. 3d ed. London, 1843, 8vo. 2003. e.
- FREEMAN (Edward). *A History of the Saracens*. London, 1876, 8vo.
- *English Constitution*. London, 1873, 8vo.
- FREHERI. (*See* GRÆVIUS, tom. xi.)
- FREINSHEIM (Johann). *Alex. Mag. daobustomis repræsentatus . . . complectitur, alter (J. F.) com. Q. Curtii, libros superstites exhibet*. 1640, etc. 8vo. 584. a. (9.)
- FRÉRET (Nicolas). *Defense de la Chronologie*. Paris, 1758, 4to. 216. a. 4.
- FROISSART (John). *Chronicles*. (*See* 1337 for the title Lieutenant of the Emperor.)
- FRONTINUS. (*See* NISARD.)
- FROUDE (James Anthony) *Nemesis of Faith*. A second edition. London, 1849, 12mo., is the only one now in British Museum Library. 2206 a.
- *Cæsar; a Sketch*. London, 1879, 8vo. 10,606. f. (3.)
- *Short Studies on Great Subjects*. London, 1878, 4 vols., 8vo. 2342. a.
- FULLER (Thomas) *Rev. History of the Holy War*. Cambridge, 1639, fol. (Mentions a bank established in Tyre during the Crusades.) 488. g. 2.
- FUSTEL (*See* COULANGES).

- GALLÆUS SERVATIUS. *Dissertationes de Sibyllis.* Amst., 1688, 4to. 704. d. 22.
- GARDTHAUSEN (V.) *Augustus und seine Zeit.* Leipzig, 1891, 8vo. 9041. f.
- GARRAULT (François). *Sieur des Gorges.* Les recherches des monnoyes, poix, et maniere de nombrer des premieres et plus renommées nations du monde. . . .
 Reduictes et rapportées aux monnoyes, poix, et maniere de nombres des François, etc. Paris, 1576, 8vo. 522. b. (4.)
- *Recueil des principaux advis donnez ès assemblées . . . en l'abbaye Saint Germain des prez, etc. . . . Paradoxe sur le fait des monnoyes.* Paris, 1578, 8vo.
- *Des mines d'argent trouvées en France.* Paris, 1834, 8vo., (included in M. L. Cimber's "Archives Curieuses.") 805. b. (3.)
- GAUBIL (Antoine). *Chronologie Chinoise.* Paris, 1776, 4to. 146. b. 20.
- *L'Astronomie Chinoise,* Paris, 1729, 4to. 50. d. 10.
- GEIKIE (JOHN C.) *Rev.* Life and words of Christ. London, 1877, 2 vols, 8vo. 4807. eee. 6.
- GERMANY. *Empire of.* Entwurf einer Grundbuch Ordnung und Entwurf eines Gesetzes betreffend die Zwangsvoll streckung, etc. Berlin, 1889, 8vo. 5604. g. 14.
- GERMANY. *Empire of.* Laws relating to Bills of Exchange. 1879, 8vo. 5606. b. 11.
- GINISTY (Paul). "De Paris à cap Nord." Paris, 1892, 4to.
- GNECCHI (Ercole). *Saggio di bibliografia numismatica delle zecchi italiane.* 1889, 8vo.
- GNEIST (Heinrich R. von). *Hist. of the Eng. Parliament.* Tr. by A.H. Keane. London, 1889, 8vo, 2394. f.
- *Hist. Eng. Constitution.* Tr. by P. A. Ashworth. London, 1891, 8vo. 2394. f. (1.)
- GOBLET (Eugene). *La Migration des Symboles.* Paris, 1891, 8vo. 4503. cc. (19.)
- GODEFROY (Jacques). *De Mutationes et Augmento monetæ aureæ. Helmstadii,* 1732.
 Legum XII. 1671, 8vo. 877. i. 4.
- GOODWIN (F.) *The XII Tables, (of the Roman Law,)* London, 1886, 8vo. 5205. aa. 17.
- GOULD (Baring). *Rev.* *Origin and Development of Religious Belief.* N. Y., 8vo., 1863.
- GRÆVIUS (Johannis Georgius). *Theosaurus Antiquitatem Romanarum, Lug. Batavorum,* 1694-9, 12 tom. fol. Tome viii contains several Roman calendars; tome xi contains the numismatic treatises of Freheri and Gronovius. 2068. e.
- GRAZIANI (A.) *Storia della teoria del Valore en Italia.* Milano, 1889, 8vo. 08229. f. (21.)
- GREAT BRITAIN. *Statutes at Large (which see.)*
- GREEK INSCRIPTIONS, Ancient, in the British Museum. Oxford, 2 vols, fol. 1874-93.
 Edited by *Rev.* E. L. Hicks, C. T. Newton, and Gustav Hirschfeld. 2068. g.
 (Including the inscriptions from Ephesus obtained by J. T. Wood in 1863-74.)
- GRESWELL (Edw.) *Fasti Temporis Catholicici.* Oxford, 1852, 4 vols, 8vo. 581. e. (22-26.)
- *Origines Kalendarie Italicæ.* Oxford, 1854, 4 vols, 8vo. 8561. d. (31.)
- *Origines Kalendarie Hellenicæ.* Oxford, 1862, 6 vols, 8vo. 8560. ee. (10.)
- GREUBER (Erwin). *The Roman Law of Damage to Property. (Lex Aquiliam, Digest, IX, 2.)* Oxford, 1886, 8vo. 5205. bb. 20.
- GROSS (J. B.) *Rev.* *The Heathen Religion.* Cambridge, Mass., 1856, 8vo. 4504. b.
- HALE (Matthew). *Sir.* *The Inrolling and Registering of all conveyances of Land.* 1694, 4to. E. 1973. (4.)
- HALIBURTON (Robert G.) *New Materials for the History of Man.* Halifax, N. S., 1863, 8vo. 4503. bb. (5.)
- HALLAM (Henry). *Literature of Europe in the 15th, 16th, and 17th centuries.* London, 1839, 3 vols, 8vo.
- *Europe during the Middle Ages.* London, 1869, 8vo.
- HAMILTON (Sir William). *Ambassador to Naples.* Discoveries at Pompeii, with Plates, London, 1717, 4to. 662. h. 18.
- HAMPSON (R. T.) *Dates, Charters and Customs, (including Calendars of the Middle Ages.)* London, 1841, 8vo. 2085. b.
- *Origines Patriciæ; or a Deduction of European titles of nobility from their original sources.* London, 1846, 8vo. 1327. g.
- HANNAY (Robert). *History of the Representation of England, and of the jurisdiction of the House of Commons.* London, 1831, 8vo. 809. g. 15.
- HARDUINI (Joannis). *Jesuite.* *Antirrheticus de Nummis Antiquis Colonarium et Municipiorum.* Paris, 1689, 4to. 602. h. 8.
- *An apology for Homer, wherein the true nature and design of the Iliad is explained and a new system of his theo-mythology proposed.* Tr. from the French. London, 1717, 8vo, 11,315. c. 5.
- *Chronologia Veteris Testamenti, and same in French.* Paris, 1677, 4to.

- HARLEZ (C. de) *Le Calendrier Avestique*. Paris, 1882, 8vo. 4503. f. 30. (2.)
- HARNACK (Adolf). *History of Dogma*. Tr. by Neil Buchanan. 1894, 8vo. 3605. k.
- HARRIS (S. F.) *Elements of Roman Law summarized*. 1889, 8vo. 2228. d.
- HELMOLDUS. *Chronica Slavorum*. Lat. and Fr. 1793, 4to. 158. i. 18.
- HELVETIUS (Claude A.) *Treatise on Man*. London, 1810, 2 vols, 8vo.
- HENRY (Robert). *Rev. History of Britain*. London, 2nd ed., 1795, 8vo., 12 vols in 7.
- HERBERT (Henry H.M.) *Earl of Caernarvon*. *Revolutions of the Druids (or Druses) of Lebanon*. London, 1860, 8vo. 10,076. c.
- HERBERT (The Hon. Algernon). "Nimrod;" a Discourse on certain passages of History and Fable. London, 1828-30, 4 vols, 8vo. 800. e. 20-3.
- *Britannia after the Romans*. London, 1836, 4to. 806. g. 3.
- HESIOD. *The Theogony; also Works and Days*. Trans. by Rev. J. Banks. (Bound with Callimachus and Theognis). London, 1856, 8vo. 2500. f.
- HIGGINS (Godfrey). *Horæ Sabaticæ*. London, 1826, 8vo., pamph. 480. b. 27.
- An argument that the Jewish Sabbath was unknown to the Patriarchs, was not instituted until the time of Moses and is nowhere enjoined to be observed in the New Testament.
- HIGGINS (Godfrey). *The Celtic Druids*. London, 1829, 4to. 2072. d. RR.
- A work of much learning, besides containing many valuable materials from Faber, Bryant, Vallancey, and other antiquarians, concerning ancient alphabets, mythology and Druidical remains.
- *Anacalypsis; an enquiry into the origin of Languages, Nations and Religion*. London, 1836, 2 vols, 4to. 2072.
- HOARE (R. C.) *Ancient Wiltshire*. London, 1838, 8vo.
- HOLINSHED (Raphael). *Chronicles of England, Scotland, and Ireland*, from the ed. of 1577. London, 1807, 6 vols, 4to. 194. c. 3-8.
- HOLWELL (William). *Mythological Dictionary*. London, 1793, 8vo. 696. g. 3.
- HOMER, *The Iliad*. I-VIII, Tr. by C. W. Bateman: IX-XXIV, Tr. by R. Mongan. London, 1848, 12mo. The *Odyssey*. Tr. by R. Mongan. London, 1848, 12mo.
- HOOPPELL (R. E). *Vinovium, the Roman City of Binchester*. London, 1879, 8vo.
- HORACE. *Works*. Tr. by Samuel Lee. London, 1873, 8vo. 2282. a.
- HORSLEY (John). *Britannia Romana, or the Roman Antiquities of Britain*. London, 1732, fol. A valuable antiquarian work; comprehensive and concise. 806. l. i.
- HOWELL (R). *Rev. History of the World*. (For Dignities of Rome, See II, 24-77.)
- HUEFFER (Francis). *Life of the Greeks and Romans*. Tr. from the German by F. H. etc. London, 1875, 8vo. 2031. a.
- Another Tr. by Ernst Guhl and W. Koner. (Not in the British Museum.)
- HUMBERT (G.) *Les finances chez les Romains*. Paris, 1886, 2 tom, 8vo. 8228. h. (28.)
- HUMBOLDT (F. H. A. Von) *Baron*. *Researches concerning the Institutions and Monuments of the Ancient Inhabitants of America: with description and plates of scenes in the Cordilleras*. The "Vues des Cordilleras," Trans. by Helen M. Williams. London, 1814, 2 vols, 8vo. 1050. k. 13.
- *Fluctuations of Gold*. (Berlin, 1838.) New York, 1900, 8vo. Cambridge Encyclopedia Publishing Company.
- HYDE (Th.) *Rev. Historia Religionis Veterum Persarum*. Oxonii, 1700, 4to. 703. d. 4.
- IBN BATUTA. *Travels into Asia*. Tr. by Rev. Sam'l Lee. London, 1829, 4to. 752. i. i.
- INDIAN ANTIQUARY (The). Bombay, 1872, 4to. (In Progress.) 14096. e.
- INGRAM (J.) *Rev. The Saxon Chronicle, with Eng. Tr.* London, 1823, 4to. 2070.
- ISHTAR AND IZDUBAR. *The Epic of Babylon, etc.* 1884, 8vo. 11652. k. (12.)
- ISVARA CHRISTNA. (See CHRISHNA.)
- JAMIESON (John, of Edinburgh). *Rev. Hermes Scythicus, or the radical affinities of the Greek and Latin Languages to the Gothic, illustrated from the Mæso-Gothic, Anglo-Saxon and Frankish; and a Dissertation on the historical proofs of the Scythian origin of the Greeks*. Edinburgh, 1814, 8vo. 71. a. 20.
- JASTROW (Ignaz). *Handbuch zu Litteraturberichten im Anschluss an die Jahresberichte der Geschichtswissenschaft*. 11899. f. 47.
- JOHN I., *Bishop of Antioch*. *Epistolæ*. Greek and Latin. In J. P. Migné's *Patrologiæ*. Series Græcæ, 1857, tom. 77, 4to. 2011. d.
- JORNANDES. *De Gothorum Origine*. Lat. and Fr., the latter by F. Fournier de Monjan, included in the "Collection des Auteurs Latins." Paris, 1850, 8vo. See NISARD.
- JOURNAL OF HELLENIC STUDIES. Academies, London, vol. III. 2056. c.
- JUAN DE PERSIA. *Relaciones*. Berlin, 1854, 8vo, broch. 9455. d

- JULIANUS (Flavius Claudius.)** *Emperor.* Select works of the Emperor Julian. Tr. by J. Duncan. London, 1784, 2 vols, 8vo. 89. i. 22-23.
- Two Orations of the Emperor Julian, one to the Sovereign Sun, the other to the Mother of the Gods. Tr. by T. Taylor. London, 1793, 8vo. 11391. g. 1.
- Arguments against Christianity. Tr. from the fragments preserved by Cyril, Bishop of Alexandria, by T. Taylor. Privately printed; only 25 copies; most of which were destroyed. London, 1809, 8vo. 3670. b.
- JUSTINIAN.** Codex (Text) XII libros, ed. J. Brunnemanus. 1679, fol. 5207. h. 5.
- Institutes. (Text.) Latin and English. Cambridge, 1876, 8vo.
- Digest. (Text.) Latin, with Spanish. Tr. by B. A. Rodriguez de Fonseca. Madrid, 1872-5, 3 vols, 4to. 5207. h. 3.
- Digest. Introduction to the study of the, with a full commentary on the title De Usufructo, by Henry John Roby. Cambridge, 1884, 8vo. 2228. cc. 6.
- Digest. (Commentary.) Private Law among the Romans. By John G. Phillimore, Q. C. London, 1863, 8vo. 2238. c.
- JUSTINUS.** *Historiæ Philippicæ, cum versione Anglica.* London, 2d ed. 1735, 8vo. Nothing whatever is known of the soi disant Justin, who abbreviated in this, the work of Trogus Pompeius. The latter flourished in the Augustan age. "Justin" was probably a monk of the seventh (not the fourth) century.
- JUVENAL.** Satires. Latin and English texts. London, 1745, 8vo.
- KEARY (C. F.)** "Norway and the Norwegians." London, 1892, 8vo.
- KEIGHTLEY (Thomas).** Ovid's Fasti, with Notes. London, 1848, 12mo.
- Mythology of Ancient Greece and Italy. London, 1859, 8vo.
- Keightley's works are more remarkable for what they ignore, than what they communicate, on the subject of ancient mythology.
- KEMBLE (Johannis M.)** Codex Diplomaticus Ævi Saxonici Opera. London, 1839, 6 vols, 8vo. Containing Latin texts relating to Britain, from A. D. 604 to 1066.
- The Saxons in England. Ed. W. De G. Birch. London, 1876, 2 vols, 8vo. 2071. d.
- KENYON (F. G.)** Aristotle on the Athenian Constitution. London, 1891, 8vo.
- In ch. XLIII there are eight lines of astronomy interpolated which will not be found in the original. See Classical Review, December, 1891.
- KINGSLEY (C.)** *Rev.* The Roman and the Teuton. London, 1864, 8vo.
- KIP (William)** *Bishop of California.* Christmas Holidays in Rome. Boston, 1869, 8v.
- LAING (Samuel).** *The Younger.* Human Origins. London, 1892, 8vo. 7704. e. 2.
- LAJARD (Jean B. F.)** Le Grand Bas-relief Mythriaque. Paris, 1828, 4to. 7820. g.
- Mysteries de Mithra: Text. Paris, 1847, 4to. (Les planches en folio.) 557. g.
- Mysteries de Mithra: Ouvrage posthume. Paris, 1867, 4to. 560. d.
- LA LOUBIÈRE (Simon de).** *Le Sieur.* The Kingdom of Siam, done out of French, by A. P. London, 1693, 2 tom., fol. 983. h.
- LANCIANI (Rodolfo), LL.D. Harv.** Ancient Rome in the Light of Recent Discoveries. London, 1888, 8vo., illustrated.
- LA PLACE (P.S. de).** System of the World. Tr. by J. Pond. London, 1809, 2 vols, 12mo.
- LAPPENBERG (J. M.)** History of England under Anglo-Saxon Kings. London, 1845.
- LE BLANT (Edmond).** L'Épigraphie chrétienne en Gaule et dans l'Afrique romaine, Paris, 1890, 8vo. 07708. f. 24.
- LECOINTRE-DUPONT (Gabriel).** Lettres sur l'histoire monétaire de la Normandie et du Perche. Paris, 1846, 8vo.
- LE GENTIL DE LA GALAISÈRE (Guillaume).** Voyage dans le Mers de l'Indie à l'occasion du passage de Venus en 1761 et 1769. 1779-81, 2 tom, 4to. 982. h. 9.
- LEON (Joachin Velasquez de).** Management of the Royal Mines in Mexico and petition for the abolition of the royal dues. 1774, fol. 9771. h. 2. (18.)
- LETRONNE (Jean Antoine).** Observations zodiacales. Paris, 1824, 8vo. 1140. d. g. (4.)
- LEVESQUE (Jean L.)** *De Burigny.* Hist. des revolutions de l'Empire de Constantinople—jusqu'à l'an 1453. Paris, 1750, 3 t. 12mo. 1053. a. (9.)
- Hist. de la Philosophie Payenne. La Haye, 1724, 12mo. 525. a. 19.
- LEWIS (Sir George Cornwall).** Astronomy of the Ancients. London, 1862, 8vo. 2244. h. 4.
- LILLIE (Arthur).** Buddha and Early Buddhism. London, 1881, 8vo. 4505. ee. 11.
- LIUTPRANDUS.** Historia ejusque Legatio ad Nicephorum Phocanæ. In Corpus Scriptorum Historiæ Byzantinæ, 1828, 8vo.
- LOBECK (Christian A.)** Aglaopharmus sive de theologiæ mysticæ Græcorum causis . . . idemque Postarum Orphicorum dispersus reliquias collegit, 2 tom. Regiomontii Prussorum, 1824, 8vo. 4505. aaa.
- Disputationis de mysterium Eleusinorum. 1824, 4to. 8357. ccc. 3. (4.)

- LOESCHER (Valentin Ernst). *Literator Celta*. Lipsiæ, 1726, 8vo. 1332. a. 5.
- LOPES FERNANDES (Manuel Barnardo). *Memoria dos medalhas e condecorações portuguezas e das estrangeiras com relacao a Portugal*. (With plates.) Lisbon, 1861, 4to. 7755. cc. (15.)
- *Memoria das moedas correntes em Portugal desde o tempo dos Romanos, até o anno de 1856*. Lisbon, 1856, 4to. 7757. f. (16.)
- LORD (Henry). *Rev.* Religion of the Banians, Parsees, etc. 1752, fol. 215. e. (6.)
- LOWNDES (William). *Essay for the Amendment of Silver Coins*. London, 1695, 8vo.
- LYSONS (Samuel). *Reliquiæ Brit. Romanæ*. London, 1801, 2 vols, fol. 562. g.
- MABILLON (Jean). *Abbd.* *Vetera Analecta*. Paris, 4 vols, 8vo., 1675-85.
- MACFARLAN (Robert). *Dissertation on the pretended identity of the Getæ and Scythians*. London, 1799, 8vo. 600. f. 1.
- MAGNUS (Nicholas). *Essay on Insurances*. London, 1755, 2 vols, 4to. 50. d. 14.
- MAINE (Sir Henry). *Roman Law*.
- MALLET (Paul Henry). *Northern Antiquities*. Trans. by Bishop Percy. London, 1826, 3 vols, 8vo. Another ed., London, 1847, 1 vol., 8vo. 2500 a.
- MANDRELL (Henry). *Rev.* *Travels in Palestine, 1697*. London, 1847, 8vo. 2500. b.
- MANILIUS (Marcus). *Sometimes written Manlius*. *Astronomicon, ex editione Benteiana, cum notis et interpre atione in usum Delphini, variis lectionibus, notis variorum, (Scaligeri, notas, etc.)* London, 1828, 2 vols, 8vo. 2055. c.
- MARIANA (Juan de). *Jesuit*. *History of Spain*. Trans. by Capt. J. Stevens. London, 1699, fol. 2 pts. 181. g. (1.)
- This work contains proofs that the Julian æra was used in Spain until about the time of the Discovery of America.
- MARTIN DU TYRAC, *Comte de Marcellus*. *Souvenirs de l'Orient*. Paris, 1839, 2 t., 8v.
- MASCOU (John Jacob). *History of the Ancient Germans and Norsemen*. Trans. by Thomas Lediard. London, 1738, 2 vols, 4to. 173. g. 1-2.
- An able and useful work, marred by national partiality. According to the writer, Germany comprehended Schleswig-Holstein, Scandinavia, and parts of Gaul, Dacia, Scythia, etc. It was a relief to find that it did not also include China and America!
- MASCOVIUS (Gottfridus). *De Sectis Sabianorum et Proculianorum in Jure Civili, etc.* Altdorfii Noricorum, 1724, 8vo. pamph., 83 pages. 700. h.
- MASPERO (Gaston). *Egyptian Archæology*. Tr. by Miss Amelia B. Edwards. London, 1887, 8vo. 2259. b. 8.
- *Life in Ancient Egypt*. London, 1892, 8vo. 7702. a. 39.
- MASSEY (Gerald). *A Book of the Beginnings*. London, 1881, 2 vols, 4to. 7703. g. 22.
- *The Natural Genesis*. London, 1883, 2 vols, 4to. 7703. 922.
- MAURICE (Thomas). *Indian Antiquities*. London, 1806, 7 vols (in 3), 8 vo. 1434. g.
- *Brahminical Fraud Detected*. London, 1812. 8vo. 1114. i. 5.
- MELON (Jean). *Essay on Commerce*. Tr. by D. Bindon. London, 1738, 8v. 8247. bbb.
- MELVILLE (Henry). *Veritas: Revelation of Mysteries by means of the Median and Persian laws. (An astrological treatise.)* London, 1874, 4to. 1891. p. 13.
- MEURSIUS (Joannes), *The Elder*. *Denarius Pythagoricus sive de Numerorum usque ad dinarium qualitate ac nominibus secundum Pythag.* Lug. Bat. 1631, 4to. 602. c. 14.
- *Historiæ Danicæ*. Amsterdami, 1638, fol. 155. b. 13.
- MICHAELIS (J. D.) *Hebrew and Julian months compared*. London, 1773, 8vo. 8561. a. 24.
- *Dissertation on the same*, by W. Carpenter, of Islington. London, 1825, 12mo.
- MIGNÉ (J. P.) *Epistolarum, libri X*, 1844, 4to. 3621. a. 10.
- MILLINGEN (James V.) *Ancient unedited Monuments*. London, 1822-6, 4to. 557. e.
- MIR KHWARD, or "MIRKHOND." (Muhammad Ibn Khavand Shah.) *History of the Early Kings of Persia*. Trans. by D. Shea. London, 1832, 8vo. 752. g. 19.
- MOMMSEN (Theodor). *Zum Romischen Kalendar, 1860, 8vo.* 8560. c.
- MONASTIER (Antoine). *Rev.* *History of the Vaudois Church*. London, 1848, 8vo.
- MONTALEMBERT (Charles de), *Comte*. *The Monks of the West*. English tr. London 1861, 7 vols, 8vo. This work is dedicated to the Pope of Rome.
- MONTESQUIEU (Charles de Secondat, *Baron de*). *Works complete*. Dublin, 1777, 4 vols, 4to. Another ed., London, 1878, 2 vols, 8vo.
- MUNRO (Charles H.) *Digest XIX, 2; a translation of that portion of Justinian's Digest which relates to Locati-Conducti, with commentary*. Cambridge, 1891, 8vo.
- *De Furtis (Digest XLVII, 2.)* Cambridge, 1893, 8 vols. 5206. aa. 13.
- MURATORI (Lodovico Antonio). *Index to the Leonine, Gelasian and Gregorian sacramentaries, according to M's Liturgia Romana Vetus, by H.A. Wilson.* 1892, 8vo.

- NASH (D. W.) *The Pharaoh of the Exodus*. London, 1863, 8vo. 9061. e. 15.
- NEPOS (Cornelius). *Lives of Illustrious Men*. Eng. Tr., Oxford, 1684, 12mo.
- NEWTON (Isaac), *Sir*. *Prophecies of Daniel*. London, 1733, 4to. 3185. h.
- NICOLAS (Nicholas Harris), *Sir*. *The Historic Peerage of England*. First ed., 1825, revised and continued by W. Courthope. London, 1857, 8vo. 2119. b.
- *Chronology of History*. (Lardner's Cabinet Library.) London, 8vo. 2103. c.
- NIEBUHR (Barthold Georg). *History of Rome*. Tr. by Hare. London, 1847-51, 3v. 8v.
- *Lectures on the Hist. Rome*, ed. by L. Schmitz, 3rd ed. Lon., 1870, 8vo. 2382. c.
- NISARD. *Collection des Auteurs Latins, avec la traduction en Français, publiée sous la direction de M. Nisard*. Paris, 1848, 30 tomes, 8vo.
- OHLENSCHLAGER (Adam Gottlob). *Die Götter Nordens*. Leip., 1829, 8vo. 11,557.bb.17.
- OPPERT (Gustav.) *Aborigines of Bharata-Varsa (India)*. Lon., 1893, 8vo. 10,007.cc.15.
- OSBORN (Robt. D.) *Islam under the Arabs*. London, 1876, 8vo.
- *Islam under the Khalifs of Bagdad*. London, 1878, 8vo.
- OVERBEEK VAN (Bonaventure). *Les Restes de l'ancienne Rome*. Paris, 1700, fol.
- *Stampe degli avanzi dell'Antica Roma rinovata*. Londra, 1739, fol. 561. f.
- OWEN (T. M.) *Hist. of England to the Norman Conquest*. London, 1882, 8vo. 9503. c. 10.
- PAGNINI DELLA VENTURA (Giovanni F.) *Della Moneta de Fiorentin*. (In Lanetti's *Nova raciahta delle monete*, etc.) 1755, etc, fol. 603. i. 9.
- PALGRAVE (Sir Francis). *Rise and Progress of the English Commonwealth*. London, 1832, 2 vols, 4to. 597. h. 13.
- *History of the Anglo-Saxons*. London, 1887, 8vo.
- PARRY (Ch. H.) *The Parliaments and Councils of England*. London, 1839, 8vo. 809. g. 1.
- PAULLY (A. F. von). *Realecyclopadie*. Stuttgart, 1893, 8vo. 2282. f. 2.
- PENN (John). *Of Stokepark, near Windsor*. *Observations in Illustration of Virgil's Fourth Eclogue*. London, 1810, 8vo. 1000. i. 20.
- PERROT AND CHIPIEZ. *A History of Art in Ancient Egypt, from the French of Georges Perrot and Charles Chipiez*. London, 1883, 2 vols, 4to.
- PERSIUS (Aulus Persius Flaccus). *Satires*. (Written about A. D. 60.) Tr. by Sir Wm. Drummond. London, 1797, 8vo. 237. f. 33.
- PETAU (*Father Denis*). *History of the World*. London, 1659, fol. 1309. k. 4.
- *De Veteri anno Rom. Kalendarium vetus Rom.* 1694, etc., tom. 8, fol. 2068. e.
- PETER (Carl). *Zeittafeln der Römischer Geschichte*. Hale, 1841, 4to. 1307. i.
- PFEFFEL, VON KRIEGLSTEIN (Christian Frederich). *Abrege Chronologique de l'histoire et du droit public d'Allemagne*. Paris, 1766, 2 vols, 8vo.
- PHLEGON (*of Tralles*). *De mirabilibus et longævis libellus*. Eiusdem de Olymp. Fragmentum. Greek and Latin. 1568, 8vo. 704. b. (21.)
- PIKE (L. Owen). *The English and their Origin*. London, 1866.
- PINKERTON (John). *Geographer, Medallist, and Antiquarian of Edinburgh*. *History of Scotland to Malcolm III., (A. D. 1056,)* with a Dissertation on the Origin and Progress of the Scythians. New ed. Edinburgh, 1814, 2 vols, 8vo. 10,370. d. 3.
- *Dissertation on the Goths*. London, 1887, (reprint,) 8vo. 1194. g. 1.
- PITTAKYS (K. S.) *L' Ancienne Athène, ou la description des Antiquities d'Athène et de ces environs*. Athens, 1835, 8vo. 1299. c. 8vo.
- PLATO. *The Dialogues (including the Laws)*. Tr. B. Jowett. Oxford, 1875, 5 vols, 8vo.
- PLINY (*The Elder*). *Natural History*. London, 1848, 6 vols, 8vo. [Some portions of a much better English translation were published by the Wernerian Club of Oxford, now defunct.] 2500. g.
- PLINY (*The Younger*). *Panegyric upon Trajan*. London, 1730, 8vo. 5. 1633-5.
- *Epistles*. London, 1786, 2 vols, 8vo. Melmoth's Translation.
- PLUTARCH. *Lives*. Tr. by J. Langthorne. London, 1825, 2 vols, 8vo.
- *Isis and Osiris*. Tr. by Rev. Samuel Squire, Bishop of St. Davids. Greek and English. Cambridge, 1744, 8vo. 704. 8. 10.
- POCOCKE (Edward). *India in Greece; containing the sources of the Hellenic race, the Buddhistic propaganda in Greece, etc*. London, 1852, 8vo. 4505. c.
- POCOCKE (Richard). *Bishop of Ossory and of Meath*. *Description of the East*. Pinkerton's Voyages. London, 1808, 4to. 2057. d.
- POLLUX (Julius). *Textrinum Antiquorum; with an appendix on the Onomasticon*, by J. Yates. London, 1843, 8vo. 1400. g. 3.
- POLYBIUS. *The histories of*. Trans. by E. S. Shuckburgh. Lon., 1889, 8vo. 9041. b. (38.)
- POOLE (R. S.) *Chronology of Ancient Egypt*. London, 1851, 8vo. 9061. e. (11.)

- POTHIER (Robert J.)** *Pandectæ Justinianæ.* Paris, 1748, fol. 5205. h. (1.)
 ——— Another ed. Paris, 1818, 5 vols, 4to. 17. b. 13-17.
 ——— *The Law of Contracts.* Eng. Trans. London, 1806, 2 vols, 8vo. 496. e. 16.
 ——— Another ed. Philadelphia, 1853, 8vo. 5423, dd. 3.
 ——— *Contract of Sale.* Boston, 1839, 8vo. 496. d. 20.
- POTOSÍ.** Un Memorial, etc. A memorial on the affairs of Potosí addressed to the King of Spain, by J. de Ibarra Gueztaraen. Madrid, 1618, fol. 1324. k. 5. (16.)
 ——— *Los Azogueros dueños de minas,* etc. A memorial of mine proprietors to the King. Madrid, 1620, fol. 1324. k. 5. (85.)
 ——— *Gremio de los Azogueros.* Madrid, Nov. 12, 1636, fol. 725. k. 18. (32.)
- PRIDEAUX (Humphrey),** *Dean of Norwich.* *Marmora Oxoniensia ex Arundellianis.* . . Conflata. . . Recensuit. Oxonii, 1676, fol. 604. h. 3.
- PRIESTLEY (Joseph),** *Rev.* *History of Early Opinions concerning Jesus Christ.* Birmingham, 1786, 4 vols, 8vo.
 The philosophical and theological works of Priestley, of which latter this is the principal one, are both numerous and verbose. They wholly fail to explain the history of Christianity.
- PROBUS (Marcus Valerius).** Leipzig, 1826, 8vo. 2053. g.
- PROCOPIUS, of Casarea.** Wars of Justinian. Lon., 1653, f. Tr. Sir H. Halcroft. 9073. h. 5.
 ——— *Secret Hist. of the Court of Justinian.* Tr. into Eng., 1674, Lon., 8vo. 1053. a. 2.
 ——— *Histoire secrete de Justinien.* M. Isambert, Paris, 1856, 8vo. Gr. and Fr. 9135. d.
- PRUDENTIUS (Aurelius Clemens).** Selections from Prudentius, trans. into English by F. St. J. Thackeray. London, 1890, 8vo. 3435. gg. 1.
 These selections are from the religious hymns and poems adapted by Prudentius from the ancient liturgy, or ascribed to him by later composers.
- PTOLEMY (Claudius).** *Tetrabiblos.* Tr. by J. Wilson. London, 1820, 12mo. 718. c. 39.
 ——— *Hypotheses et Epoques des Planetes,* by the Abbé Halma. Paris, 1820, 4to. 49. e. 5.
 ——— *Table Chronologique des Reynes,* by the Abbé Halma. Paris, 1819, 4to. 49. e. 4.
- QUATREMÈRE (Étienne Marc).** *Memoires geographiques et historiques sur l'Égypte,* etc. Paris, 1811, 8vo. (Describes the Egyptian Gold Mines of Antiquity.) 1298. c. 11.
- QUATREMÈRE DE QUINCY (Antoine Chrysostome).** *Sur le statue antique de Venus.* Paris, 1821, 4to. 561. *d. 29.
- QUINCEY (Thomas de).** Works of. Edinburgh, 1889-90, 14 vols, 8vo. 12,274. c.
- RAMBAUD (Alfred).** *History of Russia.* London, 1882-6, 3 vols, 8vo. 2392. d.
- RANKE (Carl F.)** *De Lexici Hesiychiani.* Lipsiæ, 1831, 8vo. 12,923. b. 14.
- RECLUS (Élisée).** *The Earth.* New York, 1871, 8vo.
- RECUPERO (Giuseppe).** *Storia naturale e generale dell' Etna. Opera postuma.* Catania, 1815, 2 tom., 4to. 1254. k. 19. 20.
- RÆVES (John).** *History of the English Law from the Saxons to Philip and Mary.* London, 1787-1829, 5 vols, 8vo. 508. b. 17-22.
- REITEMEIER (J. F.)** *Geschichte des Berghauses.* Gottingen, 1785, 8vo. 725. a. 24.
- RHALLES (Georgios Alexandros) and POTLES (Michael).** *Canons of the Greek Church.* Athens, 1852-59, 6 vols, 8vo. 05107. ee. 1. (2.)
- RICKARD (R.)** *The Era Calendar.* Birmingham, 1884, 12mo. 1881. a. 4. (67.)
- RIVERO AND TSCHUDI.** *Peruvian Antiquities.* Tr. by F. L. Hawks. N. Y. 1853, 8vo. 9772. d.
- ROBERTSON (W. A. S.)** *Roman Canterbury.* London, 1883, 8vo.
- RODIER (Gabriel).** *Les races humaines; chronologie, etc.* Paris, 1862, 8vo. 9006. gg. 18.
- ROUGEMONT (Frederic de).** *L'histoire de l'astronomie.* Paris, 1865, 12mo. 4378. b.
 ——— *La Peuple Primitive.* Geneve, 1855-7, 3 toms., 12mo. 10,006. d. e.
- RUDBECK (Olaf).** *Lingvæ veteris Scytho-Scandicæ sive Gothicæ.* Upsalæ, 1691, fol.
 ——— *Atlands.* Swedish and Latin texts. Stockholm, 1863, fol. (Originally printed in Upsal, 1702. The fourth vol., which was only completed to p. 210, is here reprinted in facsimile.) 9435. i.
- RUGGIERO (Ettore).** *Dizionario Epigrafico de Antichita Romane.* Roma (Loreto Pasqualacci) 1886-93, 8vo. In 1898 it was completed to the letter E. 769.
- RUSSELL (Dr. William).** *History of Europe.* London, 1810, 6 vols, 8vo.
- RYGH (O.)** *Norse Oldsager.* Christiania, 1835, 3 vols, 4to.
- SACRO BOSCO (Joannes de).** *La Sphere pour prouver que l'astrologie est très utile et nécessaire au genre humain.* Paris, 1584, 12mo. 533. b. 5. (2.)
- SAINT-CHAMANS (August de).** *Viscount.* *Traité d'Economie publique suivé d'un aperçu sur les finances de la France.* 3 tom., Paris, 1852, 8vo. 8206. d. (29.)
- SATOW (Ernest).** *The Jesuit Mission Press in Japan, 1591-1610.* 1888, 4to. 11,899. h. 33.
- SAVARY (C.E.)** *Letters on Egypt.* Tr. from the Fr. London, 1787, 2 v. 8vo. 1047. f. 6-7.

- SAVIGNY (Fred. Karl von). *Geschichte des Romischen Rechts*. Heidelberg, 1815-31, 6 vols, 8vo.
- SCARTH (H. M.) *Rev.* Roman Britain. London, 1883, 8vo. An able and interesting work, drawn from antiquarian sources. 4419. i. 39.
- SCARUFFI (Gasparo). *L'Altimonfo*. From the 1582 folio edition, included in the *Scrittori Italiani Classici*, 1803, 8vo. 1140. e.
- SCHRAM (Robert). *Eclipses of the Sun in India*. 1896, 8vo. 8561. h. (44.)
- SCOTT (Wm. A.) *Ph. D.* Repudiation of State Debts. 1893, 8vo. 08,225. ee.
- SCOTUS (Johannes Erigena). *Ein Beitrag zur geschichte de Philosophie und Theologie im Mittelalter*. 1861, 8vo. (Including Usury, etc.) 8466. bbb. (27.)
- SELDEN (John). *Titles of Honour*. London, 1631, fol. 2119. f.
- *Liber de Nummis*. London, 1678, 8vo.
- *Table Talk*. (Reprint.) London, 1869, 8vo.
- SENECA (Lucius Anæus). *De Beneficiis* (lib. V is cited in the "Mint Money" case).
- *Claudii Cæsaris Apocolokintosis*. A work in which the author ridicules the deification of the Emperor Claudius.
- SEWELL (Robert). First report on the Kristna district of the Madras Presidency. Madras, 1878, fol. 7702. k. (13.)
- *Southern India Chronological Tables*, 1894, 8vo. 8562. ff. (34.)
- SHARIF (Jafar). *Customs of the Musselmans of India*. Madras, 1863, 4to. 10,056. f.
- SHARPE (Samuel). *Orientalist*. History of Egypt. London, 1849, 2 vols, 8vo. 2502. d.
- SHIRBURN (Sir Edward). *The Astronomicor of M. Manilius*. London, 1675, 8vo.
- SILVESTRE DE SACEY (Antoine Isaac), *Baron*. *Essai sur les Mystères d'Eleusis*, etc. 1816, 8vo. 1363. f. (39.)
- *Exposé de la Religion des Druzes . . . et la vie du Khalife Hakem*, etc. Paris, 1838, 8vo., 2 vols. 696. k. (20-21.)
- SMITH (Ch. R.) *Antiq.* of Richborough, Reculver and Lymne. Lon., 1850, 4to. 10,350. d.
- *Antiquities of Trèves, Mayence, Wiesbaden, Niederbieber, Bonn and Cologne*. London, 1851, 8vo. 7707. c. 26.
- *Illustrations of Roman London*. London, 1859, 4to. 2259. f.
- SOETBEER (Adolphe). *Litteraturnachveys über Geld und Münzwesen insbesondere über der währungsstreit*, 1871-91, etc. Berlin, 1892, 8vo. 08,227. e. 35.
- SONNERAT (Pierre). *Voyage aux Indes*. Paris, 1806, 2nd ed., 8vo. 566. d. 6.
- *Voyage to the East Indies and China*. Tr. by F. Magnus. Calcutta, 1788-9, 3 vols, 8vo. 010,057. ee. 22.
- SOUCIET (Father E.) *Jesuit*. *Observations mathematiques, astronomiques, geographiques, chronologiques, et physiques, tirées les anciens Chinoises*. Paris, 1729, 4to. 50. d. 10.
- SPEED (John). *History of Great Britain*. London, 1650, fol.
- SQUIRE (Samuel), *Bish. of St. David's*. *Greek Chronol.* Cam., 1741, 8vo. 580. e. 26.
- STANLEY (Thomas), *the Elder*. *Hist. of Philosophy*. Lon., 1743, 4to., 4th ed., 523.k.5.
- STATE PAPERS. *Calendar of, Domestic Series*, (annual,) London, 1866, 8vo.
- STATUTES AT LARGE (of Great Britain). Edited by Danby Pickering, Reader of the Law Lecture to Gray's Inn. Cambridge, 1762, 8vo.
- STOW (John), *Antiquarian*. *Survey of London*. Carrisbrooke Library, reprint. London, 1889, 8vo. 012,207. i.
- STUBBS (William), *Rev., late Regius Prof. of Mod. Hist.*, Oxon. *Chronica Magistri, Rogeri de Hovedene*. London, 1858, 8vo. 2073. g.
- *Constitutional History of England*. Oxford, 1880, 3 vols, 8vo. 2320. b. 5.
- *Seventeen Lectures on Medieval and Mod. Hist.* Oxford, 1886, 8vo. 9073. e. 13.
- *The Early Plantagenets*, 2nd ed., 12mo. London, 1877.
- SUIDAS. *Cæsarum Vitæ*. 1563, fol. 815. m. 3.
- SULLIVAN (J.) *La Féodalité*, Jersey, 1885, 8vo. A brochure on the feudal system and especially as to existing survivals in the island of Jersey.
- SUMNER (Wm. G.) *The Financier and the Finances of the American Revolution*. New York, 1891, 8vo. 08,227. h. (15.)
- SYMMACHUS. *Epistolacum Symmachi V. C. præfecti Urbi, libri duo*. 10,905. c. 37
- TAYLOR (Robert), *Rev.* *The Diegesis; being a Discovery of the Origin, Evidences and Early History of Christianity*. London, 1841, 8vo.
- *Syntagma*. London, 1884, (Reprint,) 8vo.

- TAYLOR (Thomas).** *The Platonist. Eleusinian Mysteries.* 1790, 8vo. 704. e. 12.
 — Aristotle's Treatise of Animals. 1809, 4to. 520. e. 5.
 — Fragments of a Treatise on Religion by the Emperor Julian, (A.D. 361-3.) preserved by Cyril, Bishop of Alexandria, to which are added some other fragments of Julian's, relative to the Christians. Tr. into Eng. London, 1809, small 8vo. pp. 98. (Very rare, only 25 copies having been privately printed, nearly all of which were destroyed.) The same reprinted in London, 1873. 3670. b.
 — Iamblicus on the Mysteries of the Egyptians. 1821, 8vo. 8460. d.
 — Mystical Hymns of Orpheus. 1824, 8vo. 11,335. c. 33.
 — Pausanias. Itinerary of Greece. Tr. into Eng. London, 1824, 3 vols, 8vo. 1209. c. 10.
 — Translations of the Fragments of Ocellus Lucanus (B.C. 500), on the Nature of the Universe; Taurus, (the Platonist,) on the Eternity of the World; Julius Firmicus Maternus, on the Thema Mundi or Geniture of the World (from the third book of the Mathesis); and Proclus, (A.D. 412-85), on the Perpetuity of Time. London, 1831, small 8vo, pp. 96. 8461. bbb. 15.
- TEIXEIRA DE ARAGAO (A. C.)** *Descripcao historica das moedas Romanas existentes no gabinete numismatico de Sua Magestade El Rei . . . Dom Luiz I.* Lisboa, 1870, 8vo, pp. 640. 7756. bbb (7.)
 — *Descripcao geral e historica das moedas cunhadas em nome dos reis, regentes, e governadores de Portugal.* Lisboa, 1874, 8vo. 7757. dd.(7.)
- TERRIEN (de Lacouperie).** *Mem. Soc. of Bib. Archaeol.* Early History of Chinese Civilization. London, 1880, 8vo. 9057. a.
 — Paper Money of China. London, 1882, 8vo. 7756. bbb. 16.
- THEODOSIUS.** *Codex Theodosianus*, ed. G. Haenal. 1841, 4to. 705. h. (17-18).
- THEOGNIS the Megarean.** *Fragments.* Tr. by Rev. J. Banks. Bound with Hesiod. London, 1856, 8vo. 2500. f.
- THIERRY (Aug.)** *The Norman Conquest of Britain.* London, 1856, 8vo.
- THOMPSON (Henry), Rev.** *History of Roman Literature.* London, 1852, 8vo.
 On page 120 appears a representation of the Obelisk of Augustus.
- THUCYDIDES.** Tr. by Rev. William Smith, about 1740. Reprint, London, 1892, 8vo.
- TORFÆUS (Thormodus).** "Arcades," or Ancient History of Orkney. Tr. by Rev. A. Pope. Wick, 1866, 12mo. 9509. e. 3.
- TOULLIER (Charles B. M.)** *Le droit civil expliqué.* Paris, 1845, 8vo. 5403. ee.
- TOWNSEND (George H.)** *Manual of Dates.* London, 1877, 8vo.
- TROPLONG (Raymond T.)** *Le droit civil.* Paris, 1845-55, 8vols, 8vo. 5403. e.
- TURNER (Sharon).** *Tal-iesin, the Bard.* London, 1803, 8vo. 1064. l. i.
 — *History of the Anglo Saxons.* London, 8vo.
- TWISS (Sir Travers).** *Money and Currency.* Oxford, 1843, 8vo. 1390. f. 50. (3.)
 — *View of the Progress of Political Economy in Europe since the 16th Century.* London, 1847, 8vo. 1390. d. (12.)
- ULUGH BEG,** *afterwards christened Juan de Persia, q. v.*
- UPHAM (Edward).** *History of Buddhism.* London, 1829, fol. 1232. k.
- VAIRASSE (Denis).** *A voyage to Sevarambia.* Tr. from the Fr. ed. of 1675. Included in "Travels into several remote nations of the world." Vol. III, p. 12. London, 1727, 8vo. 12,612. d. 22.
- VALLANCEY (Charles).** *Ancient History of Ireland.* Dublin, 1786, 8vo. 982. d. 8.
 — *Primitive Inhabitants of Britain and Ireland.* Dublin, 1807, 8vo. 5795. (1.)
- VALERIANI (Gæetano).** *La Vita di Gesu Cristo,* (reprint.) 1869, 8vo. 4807. aa.
- VEDAS, THE.** *The Threefold Science of the Iyotish udhyayu of the Veda.* Rev. J. Stevenson. Bombay, 1833, 4to. 14,007. c. i.
 — *The Main Results of Modern Vaidaik Researches, by Ram-chandra Ghosha.* Calcutta, 1870, 8vo., pp. 57. 4505. c. 10.
 — *Hymns of the Rigveda.* R.T.H.Griffith. Benares, 1880, 8vo. 14,007. cc. 17.
 — *Sacred Books of the East.* Max Müller. Oxford, 1879, 8vo. 2003. b.
- VERSTEGAN (Richard).** *A restitution of Decayed Intelligence in Antiquities, concerning the most noble and renowned English nation.* (Eds., Antwerp, 1605; London, 1628; 1634; 1655; and 1673.) London, 1673, 8vo. 7707. b. 29.
- VINING (Edward P.)** *An inglorious Columbus. or evidence that Hwui Shan and a party of Buddhist monks from Afghanistan discovered America in the fifth century.* New York, 1885, 8vo. 9551. i. 5.

- VOLNEY** (C. F. Chassebœuf de), *Comm.* Œuvres complètes. Paris, 1838, 8 tom., 8vo.
(These works include Meditations on the Ruins of Empire; Travels in Egypt and Syria; Climate and Aboriginal Inhabitants of the United States of America; New Researches into Ancient History; and Treatise on the Alphabets and Languages of Europe and Asia.) 12,235. k. 2.
- VOLTAIRE** (Arouet de). Essai sur l'histoire générale. Paris, 1756, 7 vols. in 4, 8vo.
—— History of Europe. London, 1754, 3 vols, 8vo. 582. d. 2-5. (1.)
—— Another ed., 1758, 3 vols, 8vo. 582. d. 3-5.
- WEEDEN** (William R.) Economic and Social History of New England, 1620-1789.
New York, 1890, 2 vols, 8vo. 9602. de. g.
- WHISTON** (William A.) Vindication of the Sibylline Oracles; to which are added the genuine Oracles themselves, in Greek and English. London, 1715, 8vo. 873. i. 23.
- WIARDA** (Tileman Dothias). Geschichte und Auslegung des Salschen Gesetzes. Latin and German texts. Bremen and Zurich, 1809, 8vo. 5606. c.
- WILLIAMS** (Sir Monier). Buddhism in its connection with Brahminism and Hinduism, 2nd ed. London, 1890, 8vo. 2212. c. 1.
——Hinduism. Published by the Society for the Promotion of Christian knowledge. London, 1877, 8vo. 2212. a.
- WIMMER** (Ludv. F.A.) Die Runenschrift. Ed. by Dr. F. Holthausen. Berlin, 1887, 8vo. 7708. ee. 41.
- WORSÆ** (J. J. A.) The Danes and Norwegians in England. Tr. from the Danish. London, 1852, 8vo.
—— Ancient Norway. Tr. from the Danish.
- WRIGHT** (Thomas). The Celt, the Roman and the Saxon. London, 1885, 8vo. (An able work drawn chiefly from antiquarian sources.) 2258. b.
- YANGUAS**. Dictionario de Antiquedades., art. "Moneda."
- YARRANTON** (Andrew). England's Improvement by Sea and Land; to Outdo the Dutch without Fighting; to Pay Debts without Moneys; to set at Work all the Poor of England with the growth of our own Lands; to prevent unnecessary Suits in Law; with the benefit of a voluntary Register (registration of land titles); directions where vast quantities of Timber are to be had for the building of Ships; with the advantage of making the great Rivers of England navigable; rules to prevent Fires in London and other great Cities; with directions how the several companies of handicraftsmen in London may always have cheap Bread and Drink. London, 1577, 2 vols, 4to. (An ingenious and extremely rare work.)
- ZASIU** (Joannes U.) Epitome in usus feudarum. Lugduni, 1544, 8vo. 5306. a. 2.
- ZOROASTER**. Boum-Dehesch, cosmogonie des Parsés; trad. par M. Auguetil du Peron. Paris, 1771, 2 tom., 4to. 696. i. 6. 8.

HISTORY OF MONEY IN AMERICA.

CHAPTER I.

THE DISCOVERY OF AMERICA.

Brief review of the financial condition of Europe at the period of the Discovery—Dearth of metallic money—Motive of Columbus' expedition: to discover and obtain gold—Expeditions of Cortes and Pizarro—Expedition of De Soto—This was essentially a charter to murder, torture and enslave the natives of America, in order to obtain gold for the Crown of Spain.—Opinions of Baron von Humboldt and Sir Arthur Helps.

THE History of Monetary Systems in America can best be told after clearing the ground with a brief review of the monetary condition and circumstances of the states of Europe at the time when America was discovered. Strictly speaking, these circumstances would carry us back quite to the beginning of metallic money in Greece; but of this event a full account will be found in the author's previous works. Suffice it to say in this place that after many experiments with coins of gold and silver in the Greek and Roman republics, these metals had been so far abandoned as money that the measure of value in those states was eventually made to depend less upon the quantity of metal contained in the coins, than upon the number of coins emitted and kept in circulation by the state. The integer of these systems was called in Greek, *nomisma*, in Latin, *numisma*, both of which terms relate to that prescription of law which conserved and emphasized the numerical feature of the system in each state. Such integer consisted of the whole sum of money; not upon any fraction of it.¹

Upon the relinquishment of these systems, both the Greek states and the republic of Rome again committed themselves to metallic systems, this time with open mints or private coinage; the consequence of which was the gradual concentration of wealth in the hands of a

¹ Paulus, in the Digest.

few persons, a circumstance which powerfully assisted the downfall of the state. Upon the assumption of imperial power over the European world by Julius Cæsar and especially by Augustus, private coinage, or the issuance of "gentes" coins, was at once forbidden and the state once more assumed the control of money, which, although the pieces were still made of the precious metals, was so regulated as to constitute a more or less equitable measure of value: the principal means employed in this regulation being the imposition of mine-royalties and a seigniorage or "retinue" upon coinage, coupled with a localization of the bronze and sometimes also of the silver issues. This highly artificial system, though it lasted several centuries, gave way when the subject kingdoms and provinces of Rome revolted from her control and established themselves as independent or partly independent states; a movement that began with the so-called Barbarian uprisings of the fifth century and was completely consummated when Constantinople fell in 1204.

At this period the quantity of money in circulation, outside of the Moslem states, was extremely small; according to Mr. William Jacob, the vast acquisitions of the Empire had disappeared chiefly through wear and tear, coupled with the lack of fresh supplies of the precious metals from the mines. Much of these metals had been taken as spoil by the Moslems and transported to their various empires in the Orient; much had been absorbed and sequestered by the temples and religious houses of the West; and much had also been hidden and lost in secret receptacles. It was estimated by Gregory King in 1685 that the whole stock of the precious metals, in coin and plate, in Europe, at the period of the Discovery of America in 1492 did not exceed £35,000,000 in value; and to this estimate Mr. Jacob, after the most careful researches, lent his full support. The population of Europe at that period could hardly have exceeded thirty millions; so that the quantity of coin and plate did not much exceed in value £1, or say \$5 per capita. Of this amount it could hardly be supposed that more than one-half consisted of coins. The low level of prices at this period fully corroborates this view. Moreover, there was nothing to alleviate the scarcity of money; no means of accelerating its movement from hand to hand, and so of increasing its velocity or efficiency; no substitutes for coins; no negotiable instruments; no banks except those of the Italian republics; few or no good roads; no rapid means of communication; little peace or security; and no credit. Since the fall of the Roman empire every device by means of which this inadequate and always sinking Measure of Value could be en-

larged had been tried, but in vain. The ratio of value between gold and silver in the coins had been altered by the kings of the western states with a frequency that almost defies belief. The coins had been repeatedly degraded and debased; clipping and counterfeiting were offences so common that notwithstanding the severest penalties, they were often committed by persons of the highest respectability, by prelates, by feudal noblemen and even by sovereign kings. The emission of leather moneys had been repeatedly attempted, but the general insecurity was too great and the condition of credit too low to admit of any extensive issues of this kind of money. Bills of exchange known to the East Indians as *hoondees* and familiar to the Greeks and Romans of the republican periods, had from the same cause almost entirely fallen into disuse. The cause was the low state of credit. The social state itself, so far as it depended upon that exchange of labour and its products which is impossible without the use of money, was upon the point of dissolution, when Columbus offered to the Crown of Castile his project for approaching the rich countries of the Orient by sailing westward.

What was the object of thus seeking Cathay and Japan? To discover them? They had long been discovered and were well known both to the Moslems, who had established subject states in the Orient, and to the Norsemen, who traded eastward with Tartary and India, and had even voyaged westward to the coasts of Labrador and Massachusetts. The Italians had long traded with the Orient through Alexandria and had even sent Marco Polo into China. No. The voyage of Columbus was not to discover Cathay, but to plunder it; to plunder it of those precious metals, to the use of which the Roman empire had committed all Europe and from the absence of which its various states were now suffering the throes of social decay and dissolution.

The terms which Columbus demanded and the Crown conceded in its contract with him, is a proof of this position. He demanded one-eighth of all the profits of the voyage. To this the Crown consented, after making a better provision for itself, by requiring that in the first place one-fifth of all the treasure found or captured in the lands approached should be reserved for the king. The terms of this contract are given more fully in the author's "History of the Precious Metals," and therefore they need not be repeated here. From beginning to end it was essentially a business bargain; its object was not geographical discovery, but gold and silver; its aim was not the dissemination of the Christian religion, but the acquisition of plunder and

especially that kind of plunder of which the Spanish states at that period stood in the sorest need.

Said the illustrious Von Humboldt: "America was discovered, not as has been so long falsely pretended, because Columbus predicted another Continent, but because he sought by the west a nearer way to the gold mines of Japan and the spice countries in the southeast of Asia."³ The expeditions of Cortes and Pizarro had precisely the same objects: to discover and acquire the precious metals, without permitting any considerations of religion or humanity to stand in the way of these objects.

Forty-five years after the Discovery of America the Crown of Spain made a contract with De Soto similar to that with Columbus. It will be instructive to examine its details. This document is dated Valladolid, April 20, 1537. It provides that De Soto shall be paid a salary of 1500 ducats (each, of the weight of about a half-sovereign or quarter-eagle of the present day,) and 100,000 maravedis for each one of three fortresses which he is to erect in the "Indies." To the alcade of the expedition it awards a salary of 200 gold pesos. De Soto may take with him free of duty (*almojarifazgo*) negro slaves to work the mines. All salaries except that of the alcade are to be paid from the proceeds of the enterprise, so that in case of its failure, there will be nothing to pay. Of gold obtained from mines, the king is to receive during the first year one-tenth, during the second year one-ninth, and so on until the proportion is increased to one-fifth; but of gold obtained by traffic or plunder, he is always to receive a fifth. De Soto shall not be required to pay any taxes. He shall have the entire disposal of the Indians. There shall be reserved 100,000 maravedis a year for a hospital for the Spaniards, which shall be free from taxes. No priests or attorneys shall accompany the expedition, except the alcade and such priests as may be appointed by the Crown. After the king's fifth is laid aside from the spoils of war, and the ransom of caciques, etc., then one-sixth shall go to De Soto and the remainder divided among the men. In case of the death of a cacique, whether by murder, public execution, or disease, one-fifth of his property shall go to the king, then one-half of the remainder also to the king, leaving four-tenths to the expedition. Of treasure taken in battle or by traffic, one-fifth shall go to the king; of treasure plundered from native temples, graves, houses or grounds, one-half to

³ "Fluctuations of Gold," Berlin, 1838. American edition, 1899, p. 10.

the king without discount, the remainder to the discoverer. Signed, CHARLES, The King. ³

Here is a charter to murder, torture and enslave human beings, to despoil temples and to desecrate graves. It is signed by the King of Spain who was also the Emperor of Germany; it is committed to a swash-buckler who by the most infamous means had made his fortune with Pizarro in Peru; it is as sordid a document as ever was penned; a disgrace to Spain, to Christianity, to civilization. It plainly and unequivocally lays bare the motive of this expedition. This was not to discover or explore North America, but to plunder it of gold and silver, to replenish the coffers of the king, to provide those blood-stained metals out of which man, in retrogressive periods, is obliged, through his own degeneracy and distrust of his fellow-men, to fabricate his Measure of Value. Said Sir Arthur Helps, the accomplished historian of the Spanish Conquest of America: "The blood-cemented walls of the Alcazar of Madrid might boast of being raised upon a complication of human suffering hitherto unparalleled in the annals of mankind. . . . Each ducat spent upon these palaces, was, at a moderate computation, freighted with ten human lives."⁴ Let us be still more moderate and say one human life to the ducat: even this was sufficiently atrocious.

³ This document appears in full in the *New York Historical Magazine* for February, 1861. (Br. Mu. Press mark, P. P. 6323.)

⁴ "The Conquerors of America and their Bondsmen," London, 1857, III, 215.

CHAPTER II.

THE CONQUEST

Gold the first inquiry of Columbus—Its fatal significance to the natives—Columbus' second voyage—The mines of Cibao—Columbus proposes to ship the natives as slaves to Spain—Sufferings of the colonists—Their search for gold—Their disappointment and cruelty—Columbus ships four cargoes of natives to Spain as slaves—He hunts the natives with bloodhounds—Despair of the natives—Columbus reduces them all to vassalage—Their rapid exhaustion and extinction—Story of the cacique Hatuey—The golden calf—Cruelty of Ovando—Death of Queen Isabella—Her terrible legacy to Ferdinand—Columbus dies in poverty and debt—Forty thousand natives dragged from the Bahamas and condemned to the mines—Character of the gold-seekers.

NO sooner had Columbus taken formal possession of the island of Hispaniola than he asked the wondering natives for gold. This fatal word, so fraught with misfortune to the aborigines that it might fittingly furnish an epitaph for their race, and so tainted with dishonour to their conquerors that four centuries of time have not sufficed to remove its stigma, seems to have been literally the first verbal communication from the Old World to the New.

Some of the islanders had a few gold ornaments about them. "Poor wretches" (says Navarette) "if they had possessed the slightest gift of prophecy, they would have thrown these baubles into the deepest sea!" They pointed south and answered, "Cubanacan," meaning the middle of Cuba.

Shortly after the discovery, Columbus was wrecked on the coast of Cuba, and he sent to the neighbouring cacique, Guacanagari, to inform him of his misfortune. The good chief was moved to tears by the sad accident, and with the labour of his people lightened the wrecked vessel, removed the effects to a place of safety, stationed guards around them for their better security, and then offered Columbus all of his own property to make good any loss which the latter had sustained.

Touched by this unparalleled kindness, Columbus thus expressed himself of these Indios: "They are a loving uncovetous people, so docile in all things that, I assure your Highnesses, I believe in all the world there is not a better people or a better country; they love their

neighbours as themselves, and they have the sweetest way in the world of talking, and always with a smile."

In return for their hospitality and loving kindness, the Spanish captain resolved to establish a colony among them, having found such goodwill and such signs of gold. He built a fort, called it La Navidad, left forty adventurers in it, among them an Irishman and an Englishman, and sailed to Spain.

The first thing done, after his return home—the recital of his wondrous story, his reception at the Court of Spain, and the Te Deum—was to obtain a grant of the newly-found domain and all its contents, animate and inanimate, from the Pope of Rome. These objects were effected by a Bull, dated May, 1499.

In September, 1493, Columbus set forth again, this time with seventeen vessels and 1500 men.

He found La Navidad destroyed, and his forty colonists missing. According to the cacique, Guacanagari, the Spaniards had made a raid, probably for gold, upon a tribe of the interior, and notwithstanding the advantages of their arms, had been defeated and killed to a man. Columbus built another fort in another part of the island, called it Isabella, and at once gave his attention to the subject of gold.

"Hearing of the mines of Cibao, he sent to reconnoitre them; and the Indios, little foreseeing what was to come of it, gave gold to the Spanish messengers. Columbus accordingly resolved to found a colony at Cibao."

In January, 1494, Columbus sent to the joint sovereigns of Spain, by the hands of Antonio de Torres, the Receiver of the colony, an account of his second voyage, with recommendations for the consideration and approval of Los Reyes.

After the complimentary address, it begins with the reasons why the admiral had not been able to send home more gold. His people have been ill; it was necessary to keep guard, etc. "*He has done well,*" is written in the margin by order of Los Reyes.

He suggests the building of a fortress near the place where gold can be got. Their Highnesses approve: "*This is well, and so it must be done.*"

He then suggests to make slaves of the Indios, and to ship some of them to Spain, to help pay for the expenses of the expedition. The answer to this atrocious project is evasive, as though Los Reyes did not wish to wound so valued a servant by a point blank refusal. It is: "*Suspended for the present.*"

Money was very welcome at the Spanish Court, where there was more show than maravedis; but Los Reyes were not yet prepared to obtain it by sanctioning the enslavement of an innocent and friendly people. On the other hand, Columbus was eager for the measure.

While de Torres was at the Court with these recommendations, Columbus' colony fared badly on the island. The provisions which they had brought with them failed, and white men were threatened with starvation, where the Indios lived without effort. To their great disgust the Spaniards had to go to work, and till the earth for bread, instead of scouring it, as they had expected, for gold.

"The rage and vexation of these men, many of whom had come out with the notion of finding gold ready for them on the sea shore, may be imagined. . . . The colonists, however, were somewhat cheered, after a time, by hearing of gold mines, and seeing specimens of 'ore' brought from thence; and the admiral went himself, and founded the fort of St. Thomas, in the mining district of Cibao."

It is needless to say that, without the establishment of any permanent sources of supplies, the gold hunters failed in their enterprise, and most of them lost their lives. "They went straggling over the country; they consumed the provisions of the poor Indians, astonishing them by their voracious appetites; waste, rapine, injury and insult followed in their steps."

Worn out with their sufferings, the miserable Indios "passed from terror to despair," and threatened the Spanish settlement. Columbus sallies forth, routs the Indios of Macorix, and captures the majority, four shiploads of whom he sends to Spain, February 24, 1495, as slaves. These were the very ships that brought out the evasive reply of Los Reyes to Columbus' request for leave to enslave the natives.

After this, Columbus starts upon another expedition, at the head of 400 cavalry, clad in steel, armed with arquebuses, and attended by bloodhounds. He is opposed by 100,000 Indios. Their soft and naked bodies not being proof against horses, fire-arms, or ferocious dogs, a horrible carnage ensues, and another bloody installment is paid towards the cost of gold. Columbus captures the cacique, Canabó, through the vilest treachery, and imposes a tribute of gold upon the entire population of Hispaniola.

The tribute is as follows: Every Indio above fourteen years old, who was in the provinces of the mines, or near to these provinces, was to pay every three months a little bellfull of gold; and all other Indios an arroba of cotton.

When this unreasonable tribute was imposed, Guarionéx, cacique of the Vega Real, said that his people did not know where to find the gold, and offered in its place to cultivate a huge farm, fifty-five leagues long, covering the whole island, and to produce therefrom enough corn to feed the whole of Castile. Poor Indio! This was, indeed, a suggestion of despair. Hispaniola, at the utmost, did not contain more than 1,200,000 Indios, man, woman, and child. Castile contained a population of 3,000,000 or 4,000,000. An attempt to feed a population so large by one so small, and at a distance of 4,000 miles, could only have ended in failure. But Guarionéx might as well have made this as any other proposal. What their Catholic Majesties wanted was not bread but gold; and this is what, in their names, Columbus was bent upon obtaining. Yet however much he desired it, the gold could not be collected, simply because there were no gold mines of any consequence, only some poor washings, in Hispaniola, from whence it might be got. Columbus was, therefore, obliged to change the nature of his oppressions. This was done by reducing the whole native population to vassalage; and thus, in the year of our Lord 1496, was begun the system of *repartimientos* in America.¹ Such was the reward for the unparalleled kindness of good Guacanagari, and for his loving, uncovetous people, "who always spoke with a smile."

Reduced to a condition of vassalage, infinitely worse than slavery, the Indios fell into the profoundest sadness, and bethought themselves of the desperate remedy of attempting to starve out their masters by refusing to sow or plant anything. The wild scheme reacted upon themselves. The Spaniards did, indeed, suffer from famine; but power, exercised in the cruelest manner, enabled them to elude the fate which had been intended for them; whilst the Indios died in great numbers of hunger, sickness and misery.

In the early part of 1496, Columbus discovered a gold mine in the south-eastern part of Hispaniola. On his return to Spain in the same year he sent out orders to his brother Bartholomew to build a fort there. This was done and the place called San Domingo. From this port Bartholomew sailed out to Xaragua, east of the modern

¹ The *repartimiento*, afterwards the *encomienda*, was derived from the feudal tenures of Spain. It was a grant of Indios (not including land) to render fixed tribute, or personal services, or both, during the life of the *encomendero* or suzerain. This was afterwards extended to two, three, four, five and six lives, and was greatly abused. Consult Irving's "Conquest of Granada," vol. i, pp. 145, 164, 173, 197, 198, and iv, p. 353 *et seq.*

Port-au-Prince, the only unconquered portion of the island. He reduced it to vassalage and demanded tribute in gold. The cacique Bohechio pleaded that there was no gold in his dominions; so the tribute had to be commuted in cotton and cassaba-bread. Returning to Fort Isabella, Bartholomew found that 300 of his followers had died from hunger and disease, the first considerable installment of the myriads of Spaniards who subsequently perished in the same criminal search for the precious metals.

In 1498 Columbus again set forth from Spain—this time with eight ships and about 900 men. Upon his arrival at San Domingo he sent five of these ships to Spain laden with 600 slaves.

The Court of Spain—at first conditionally, as though it hesitated to thwart its favourite commanders, afterwards absolutely, when it found that none of them were above the practice, and that all evaded the conditions—disapproved of enslaving the Indios. Its objection to this transaction of Columbus was that the captives were not taken in war, and it marked the severity of its displeasure by superseding Columbus in his command and ordering him home.

The officer chosen to replace him was Ovando. In the instructions given to this knight A. D. 1501, he was ordered to treat the Indios justly, and pay them one golden peso a year for their labour in getting gold. Between subjecting themselves to these conditions and living in a state of slavery, there could have been to the Indios but little choice, even if it had been accorded to them. It is due to the Spanish Crown to say that deceived by the reports of the over-sanguine gold-hunters, it supposed that gold was easy of acquisition in the West Indies, and that a moderate amount of involuntary labour on the part of the natives would suffice to produce what was demanded of them.

Ovando left Spain in 1502 with a score or more vessels, and 2,500 persons. As these vessels neared the shore of San Domingo, the colonists ran down to hear the news from home, and, in return, to narrate that a lump of gold of extraordinary size had recently been obtained on the island. It had been picked up by a native woman and was estimated to have been worth 1,350,000 maravedis. Nothing more clearly reveals the character of these expeditions and the persons who composed them, than a brief relation of the fatal consequences of this announcement. Ovando's people no sooner landed than they ran off to the placers, where, in a short time, more than 1,000 of the 2,500 perished miserably from hunger and disease.

“Here it may be noticed that, in general, those colonists who devoted themselves to mining, remained poor; while the farmers grew

rich. When melting time came, which was at stated intervals of eight months, it often happened that after the king's dues were paid, and those who had claims upon the produce for advances already made to the miners, were satisfied, nothing remained for the miner himself. *And so all this blood and toil were not paid for, even in money;* and many still continued to eat their meals from the same wooden platters they had been accustomed to in the old country; only with discontented minds and souls beginning to be imbruted with cruelty." (Helps.)

At this juncture, Columbus, authorized to make further explorations in the New World, suddenly appeared at San Domingo. The orders of the Crown forbade him to disembark at the island, for fear that the course of administration for which he had been rebuked would be persisted in; but a violent hurricane was apprehended, and the safety of his fleet afforded him sufficient excuse to seek a harbour. In this storm, which took place as the admiral had foreseen, the greater part of a large fleet of vessels which had recently set sail for Spain were lost, with all on board—another sacrifice to the thirst for gold.

Shortly after this, a force of 400 men was sent to reduce the Indios of the province of Higüey. These unfortunates were hunted with firearms and bloodhounds. Of the captives taken, those not wanted as slaves had both their hands cut off, many were thrown to the dogs, and several thousand put to the sword.

Ovando, finding that, under the merciful instructions of Los Reyes about dealing with the Indios, he could get no gold—for they shunned the Spaniards "as the sparrow the hawk" and fled to the woods, there to avoid them and die—transmitted to the Court a report to this effect. In a reply dated December, 1503, Ovando was directed "to compel" the Indios to have dealings with the Spaniards; and thus the slave system begun by Columbus, was re-established by the Court.

It may not be uninteresting in this place to hear what the Indios themselves thought about the conquest of America and the motives which impelled the Spaniards in its prosecution. Something of this is embodied in the story of Hatuey, cacique of a province of Cuba.

Apprehensive that the Spaniards would come, as they afterwards did come, to his territory, Hatuey called his people together and recounting the cruelties of the white men, said they did all these things for a great God whom they loved much. This God he would show them. Accordingly he produced a small casket filled with gold.

“Here is the God whom they serve and after whom they go; and, as you have heard, already they are longing to pass over to this place, *not pretending more than to seek this God*; wherefore let us make to him here a festival and dances, so that when they come, He may tell them to do us no harm.” (Herrera.)

The Indios approved this council, and to propitiate the God whom they thought their enemies worshipped, they danced around it until they were exhausted; when the cacique turned to them and said that they should not keep the God of the Christians anywhere, for were it even in their entrails it would be torn out; but that they should throw it in the river that the Christians might not know where it was; “and there,” says the account “they threw it.”

In 1503, Ovando set out with 70 horsemen and 300 foot-soldiers to visit the friendly Queen Anacaona of Xaragua, who hospitably received him with feasting and rejoicing. In return, Ovando, whose object was to terrify the unhappy natives into submission and slavery, invited the chiefs to a mock tournament, where, at a signal from himself, the queen and her caciques were all treacherously captured, the former was put to death by hanging and the latter were burnt alive.

Shortly afterwards, in an expedition against the Indios of the province of Higüey, the Spaniards cut off the hands of their captives, hanged thirteen of them “in honour and reverence of Christ our Lord and his twelve Apostles,” and used the hanging bodies of their miserable victims as dumb figures to try their swords upon. At another time, the Indios were burnt alive in a sort of wooden cradle. “*Todo esto yo lo vide con mis ojos corporales mortales.*” All this I saw with my own corporeal mortal eyes. (Las Casas.)

Queen Isabella of Spain died in November, 1504. Could she with her dying eyes have seen into the Far West, she would have “beheld the Indian labouring at the mine under the most cruel buffetings, his family neglected, perishing, or enslaved; she would have marked him on his return, after eight months of dire toil, enter a place which knew him not, or a household that could only sorrow over the gaunt creature who had returned to them, and mingle their sorrows with his; or, still more sad, she would have seen Indians who had been brought from far distant homes, linger at the mines, too hopeless or too careless to return.”

Isabella's will contained a bequest which unfortunately removed all restraint from the oppressions visited upon the Indios. She left to her widower, the Regent Ferdinand, one-half of the revenues of the

Indies as a life estate. In the methods which were resorted to for the collection of these revenues, this meant one-half of the gold which could be extorted by the sweat and blood of the Indios; and Ferdinand, needy and thus endowed, withheld no licence to the adventurers in America, which they alleged was needful in order to swell the Fifths due to the Crown, and the importance of the Queen's legacy.

Upon the death of Isabella, Ferdinand, not being the immediate heir to the crown of Spain, retired to his kingdom of Naples, and was succeeded in the government of Spain by King Philip. This monarch died in 1506, and Ferdinand then became King of Spain. A few months before this, Columbus had died, and, as we shall see of all the Conquistadores, in poverty and debt.

At this period the Indios had become "a sort of money" which was granted in repartimiento to favourites at the Spanish court. "The mania for gold-finding was now probably at its height, and the sacrifice of Indian life proportionately great." So few of the Indios remained alive that negro slaves began to be imported from Africa to fill their places at the mines.

The king was told that the Bahama Islands were full of Indios who might be transported to Hispaniola in order that "they might assist in getting gold, and the king be much served." Ferdinand, who was fully as mindful of his interests as the adventurers upon the islands, gave the required licence, and the evil work commenced. In five years time, forty thousand of the Bahamians, captured under every circumstance of treachery and cruelty, were transported across the sea, all of them to die lingering deaths at the gold mines.

This was among the last acts of the Ovando administration which closed with the appointment of Diego Columbus in 1509. Only seventeen years had elapsed since the discovery of the island. According to Humboldt's "Fluctuations of Gold," the amount of gold thus far obtained was scarcely more than five million dollars. The cost of its production was several expensive expeditions with their outfits, some thousands of Spanish lives, and at least a million and a half of Indios!

Such was the cruelty of the gold-hunters, and the terror they inspired in the natives, that according to the Abbé Raynal, when Drake captured San Domingo in 1586, he learned from the few survivors of what had once been a populous country that, rather than become the fathers of children who might be subjected to the treatment which they had endured, they had unanimously refrained from conjugal intercourse.

It must not be supposed that these atrocities were peculiar to the Spaniards: rather was it peculiar to the class of adventurers to be found in all countries who, in the hope of rapidly and easily acquired fortunes, coupled with the fascination of a career of adventure, licence, and rapine, are the first to brave the dangers and seek the profits of a miner's life. Similar cruelties have been related of the ancients, who were not Spaniards. Similar ones can also be told of the Portuguese, the English, the French, as well as the Americans. They are narrated here of the Spaniards simply because these instances are connected with the greatest supply of the precious metals known to history.

"I swear that numbers of men have gone to the Indies who did not deserve water from God or man," wrote Columbus to the home government, and it was the same with those who went from other countries than Spain.

The vilest scoundrels in Europe were let loose upon the unoffending aborigines of America, and the darkest and most detestable crimes were committed in the sacred name of Jesus Christ.

To these cruelties the necessities of the Crown opened the door. A letter of King Ferdinand to the colonists of Hispaniola is thus fairly paraphrased: "Get gold: humanely if you can; but at all hazards get gold; and here are facilities for you."

CHAPTER III.

EL DORADO.

The legend of Dorado—Religious ceremony of the Muiska Indians of New Granada—Version of Martinez—Simon—Orellana—Sir Walter Raleigh—Vain searches for the Golden Country of the legend—The real gold country of South America found by the Portuguese in Brazil—Terra Firma mistaken for Dorado—The former an earthly paradise—Gold money and trinkets of the natives—Desolation caused by the European gold hunters—The pearl fishery—Slave hunting—Las Casas—His despair and retirement—Cruelties of the Spaniards—The actual gold region of Terra Firma, or Venezuela—Its present condition.

EL DORADO means "The Golden," or "The Gilded." It was applied by the Spaniards to that country of limitless gold which their avid imagination had located in South America, some of them fixing it in the Valley of the Essequibo, others in that of the Orinoco, and others again among the Muiska Indians of Bogotá, whose high-priest, it was said, clothed himself during a religious ceremony, with the dust of the metal so much coveted by the Spaniards. Martinez saw El Dorado in Manoa, a city of Guiana, whose buildings were roofed with gold; while in 1540, Orellana recognized it in the valley of the Amazon, whither Raleigh afterwards went to seek it, but found it not. In truth, it never existed at all. It was a myth created by cupidity and nourished by credulity, the search for which cost the lives of myriads of natives and not a few adventurers, both Spanish, English and others.

One of the legends of El Dorado is given by a Spanish monk named Simon, who says that a Spanish captain named Sebastiano Belalcázar having invaded the district of Lake Guatavita near Bogotá, questioned the natives about gold, asking the spokesman if there was any such metal in his country. "He answered that there was abundance of it, together with many emeralds, which he called greenstones," and added that "there was a lake in the land of his overlord which the latter entered several times a year, upon a raft, advancing to its centre, he being naked, except that his entire body was covered from head to foot with an adhesive gum, upon which was sprinkled a great quantity of gold dust. This dust sticking to

the gum became a coating of gold, which upon a clear day shone resplendently in the rising sun; such being the hour selected for the ceremony. He then made sacrifices and offerings, throwing into the water some pieces of gold and emeralds. Then he caused himself to be washed with saponaceous herbs, when all the gold upon his person fell into the lake and was lost to view. The ceremony being concluded, he came ashore and resumed his ordinary vestments. This news was so welcome to Belalcázar and his followers that they determined to penetrate this golden country, which they called La Provincia del Dorado—that is to say, the Golden province, where the cacique gilds his body before offering sacrifices. Such is the root and branch of the story that has gone out into the world under so many different forms by the name of El Dorado."

Another version of the Dorado appears to have originated with Francisco Orellana, a companion of Pizarro in Peru. When in 1540 Gonzalo Pizarro started to hunt for gold and slaves east of the Andes, Orellana was second in command of the expedition, which comprised 350 Spaniards, 4,000 Indian porters, and 1,000 blood-hounds for hunting down the natives. After crossing the mountains, the Spaniards discovered the Napo, one of the upper affluents of the Amazon. Despairing, for lack of provisions, of being able to return by the route they had taken, the adventurers constructed a "brigantine" large enough to hold a portion of their numbers and the baggage. The command of this vessel was given by Pizarro to Orellana, with instructions to keep in touch with those who intended to follow the course of the stream afoot. Their provisions becoming at length entirely exhausted, Orellana was instructed to drop down the stream with 50 soldiers, to a village reputed to be some leagues below and return with such provisions as he could secure. In three days Orellana reached the Amazon, which here flowed through a wilderness destitute of human food. To return was difficult; to abandon his commander and continue down the stream, was a course that promised many advantages. This course he adopted. Starting from the confluence of the Napo and Amazon, in February, 1541, Orellana reached the ocean in the following August, thence he sailed to Cubagua and afterwards to Spain. Broken in fortune, health and reputation, Orellana had still a card left to play; this he found in his fertile imagination. He reported that he had voyaged through a country only inhabited by women, and where gold was so plentiful that houses were roofed with it. In Manoa, the capital, the temples were built with the same costly material. Nothing was too extravagant to

be believed by the greedy ears of cupidity. His tale spread so fast and received such wide belief that several expeditions were organized, some within the same year, to subdue the fair huntresses of South America and carry home to Spain the sheathing of their golden temples and dwellings. One of these expeditions was headed by Philip de Hutten, a German knight, who started late in 1541 from Caro, on the Pearl Coast, with a small band of Spaniards. After a brief absence he returned to the coast with the story that he had penetrated to the capital of the Omegas, that the roofs of the houses shone like gold, but that he had been driven away by the natives and therefore required a larger force and "more capital" to prosecute the adventure. There was no tribe of Omegas in South America. There was a tribe of Amaguas on the banks of the Amazon, but it does not appear that Hutten had traversed so great a distance. Should it be admitted that this gold hunting "noble" was capable of drawing the long-bow, his story might be explained without discussing this objection. However, he succeeded in obtaining what he wanted—more men and more capital; but while preparing his second expedition, he perished by the hand of one of his associates. (Malouet's "Guyane.")

In 1545 Orellana, having procured sufficient capital for the purpose, set sail from Spain with a large and well equipped force, to conquer the haughty Amazons and pillage their imaginary Dorado. He was fortunate in dying peaceably on the voyage; for his companions would assuredly have murdered him when they came face to face with the dismal truth. It is needless to say that the expedition miserably failed; but though Orellana died and his expedition perished, his lie lived a long life; and it is possibly not quite dead yet.

The most famous of the numerous expeditions to discover and pillage this figment of Orellana's brain was organized by Sir Walter Raleigh. After massacreing the Spaniards who aided Desmond in Ireland, seizing for himself twenty thousand acres of Desmond's lands and debauching one of Queen Elizabeth's maids of honor, and thus rendering himself quite eligible for an enterprise of this character, he prepared for a voyage to the land of gold. In 1595 he set sail with five ships. After spending several months in roaming the country between the Amazon and Orinoco, he returned to England with Orellana's tale embellished. In his "Discovery of the Large, Rich and Beautiful Empire of Guiana," he describes the gilded King of this favored country (el rey Dorado) whose chamberlains, *every morning*, after rubbing his naked body with aromatic oils, blew powdered gold over it, through long sarbacans! It has been shown in

a previous work that Raleigh never had the least intention to prospect or mine for gold; and that he was not even equipped with the picks and shovels which would form the most elementary tools needed for such purposes; in short, that the expedition was designed to plunder and enslave the natives and not to prosecute any legitimate industry. But indeed Raleigh was not the only adventurer of this type. In the Spanish records and in Rodway's volume we find whole catalogues of ruffians who had no word but "gold" upon their lips, no thought but of greed and murder in their heads. Juan Corteso, Gaspar de Sylva, Jeronimo Ortal, Father Iala, Alonzo de Herrera, above all, that prince of monsters Lope de Acuirre, colour the pages with the darkest hues of bloody emprise. As for Acuirre, there is no more terrible story in all the history of the Spanish Main. A companion of the dashing Pedro de Ursua, he set out in the year 1560 to search the Amazon for treasure cities, and within a month he had murdered his captain and all those who stood by him. Two days later he cut the throat of the beautiful Donna Iñez de Altienza, who had followed Pedro from Spain to share the dangers and hardships of his undertaking.

Acuirre was about fifty years of age, short of stature and sparsely built, ill-featured, his face small and lean, his beard black, and his eyes as piercing as those of a hawk. When he looked at any one he fixed his gaze sternly, particularly when annoyed; he was a noisy talker and boaster, and when well supported, very bold and determined, but otherwise a coward. . . . He was never without one or two coats of mail or a steel breastplate, and always carried a sword, dagger, arquebuse, or lance. His sleep was mostly taken in the day, as he was afraid to rest at night, although he never took off his armour altogether, nor put away his weapons.

It is a curious fact that those who searched for El Dorado never found it; whilst those who never searched for it, found not indeed El Dorado, but the only great gold bearing districts of America south of California. These were neither in New Granada, Terra Firma, the West India islands, nor New Spain, nor indeed in any part of America invaded by the Spaniards; but in Brazil. After the Spaniards had plundered the Indians of their trinkets, after they had worn them out in the petty gold placers of Hispaniola, Mexico, the Isthmus, New Granada and Peru, after they had dug into the ancient graves of the Indians and robbed the dead of the ornaments which had been devoted by the hands of piety, they came to a halt.¹ There

¹ The Peruvian and Central American graves were classified by those who dishonoured them into "Huacas de Pilares" and "Huacas Tapadas," or graves without tombstones, the former being richer than the latter and commanding a higher price in the Spanish markets!

was evidently no more gold to be got; and but for the adventitious discovery of the silver of Potosí, they would probably have abandoned the countries they had ruined and permitted the remains of the native races to recover from their devastating presence. But Potosí, together with the subsequent discoveries of rich silver mines in Mexico, sealed the fate of the Indians.

Meanwhile, something resembling a Dorado had been discovered by the Portuguese in Brazil. This was in 1573, when the placers of Minhas Geraes were discovered by Sebastião Fernandes Tourinhõ. A quarter of a century later, 1595-1605, occurred the great discoveries at Ouro Preto. From first to last these mines produced no less a sum in gold than £180,000,000. Dr. Southey's estimate is upwards of £250,000,000; but this appears to be excessive. It was estimated in 1880 that, weight for weight, Brazil had produced only a fourth less gold than either California or Australia. "When it is considered how much less gold there was in the world's stock of the precious metals at the period when Brazil threw her auriferous product into Europe, than there was when California and Australia began to be productive, the importance of the Brazilian mines is seen to have been even greater than that of the great placers of the present century."²

Among the smaller placers of the world whose importance was great enough to exercise some influence upon the history of money in America, were those of the Apalachian Range of North America which yielded from first to last—1824 to 1849—about ten million dollars in gold. It was these mines and the Russian placers of the same period which called forth that remarkable but little known treatise of the illustrious Von Humboldt, "The Fluctuations of Gold," than which no more fascinating monograph on the subject has ever been written.³ Here it was, in North Carolina, that the writer enjoyed his early experience as a mining engineer. A number of Spanish relics, such as spear-heads, horse-shoes, etc., of ancient types, picked up near the gold placers of Salisbury, testify to the presence of the early gold hunters much farther North than they are commonly supposed to have ventured.

But let us return to the terrible and pathetic history of El Dorado; terrible in respect of the desolation and ruin which, in the pursuit of gold, the Spaniards wrought upon this beautiful land and its innocent

² Del Mar's *History of the Precious Metals*, ed. 1880, p. 124.

³ Originally published in Berlin, 1838; republished in New York by the Cambridge Encyclopedia Company, 1899.

inhabitants; pathetic with respect to the hopeless efforts which one good man among them made to avert this ruin and lead the natives by pious methods into the fold of Christianity. Those who would peruse this story in detail should consult Sir Arthur Helps' admirable work. The scope of the present history compels us never to lose sight of the precious metals and their immediate surroundings.

Yet there is one more reflection which this history enforces upon us and for which we must beg the reader's indulgence. From the moment when America was discovered by the Spaniards down to the present day, it does not seem to have possessed any further interest for them or for the rest of Europe beyond that of seeing it exploited for the precious metals. The first rude conquerors who visited it from the older world, ravaged it for golden spoil; the race of men who followed afterwards, dug into its mines and gutted them of their precious contents, only to transport these to Europe; the alien financiers who to-day are permitted to influence so largely the polity of America, exercise their power largely for the sake of the gold it produces. The means employed by the Spaniards was pillage; by the Creoles, slavery; and by the aliens, who are permitted to mould its laws at the present day, a chicanery misnamed "finance." The object has been the same with all of them, gold; the destination of the gold has always been the same, the mints of Europe; there to enrich classes who are already rich and keep the remote regions which produced this wealth, in comparative indigence. It is not, as has been falsely claimed, the Catholic religion, which keeps South America poor, nor a republican form of government which subjects the vast resources and energies of North America to the designs of the arch-intriguants who govern the banks and exchanges of Europe. It is that European System of Money, which, whether the coins were made of one metal or two metals, has never failed, so long as those metals were gratuitously coined and free to be melted down on both sides of the Atlantic, to withdraw the bulk of them to Europe and place the American states at the mercy of the European mints and melting houses and the classes who control them.

The native name for that portion of the South American continent which stretches from the Orinoco to Cumaná was Paria; whilst from Cumaná to the Gulf of Venezuela it was called Cumaná. Together, these districts were called by the Spaniards, the Pearl Coast, whilst the interior portion was at a later period called El Dorado. That larger tract of coast which stretches from the Amazon to the Magdalena, was called Terra Firma, and within it are comprised the present

states of the three Guianas and Venezuela. It is described by the early voyagers as an earthly heaven; indeed Columbus told his men, when his ship was in the Gulf of Paria, that he thought it must be "a Continent which he had discovered, the same Continent of the East of which he had always been in search; and that the waters, (which we now know to be a branch of the river Orinoco,) formed one of the four great rivers which descended from the garden of Paradise." He added that "they were in the richest country of the world," a remark, which, it seems, however, was not applied to the fertility of its fields, but to his expectations of gold. (Oviedo, *Hist. Gen. Ind.*, XIX, i.)

The Chimay Indians who inhabited the coasts, were not savages, but agriculturalists, fishermen and hunters. They lived in permanent dwellings, sat upon chairs, dined at tables and, alas, for their own happiness,⁴ they wore ornaments of gold and necklaces of pearls. It was these trinkets that attracted the cupidity of the Spaniards and doomed the native races to destruction.

Columbus described these people as "tall, well built, and of very graceful bearing, with long smooth hair, which they covered with a beautiful head dress of worked and coloured handkerchiefs, that appeared at a distance to be made of silk." Everywhere he met with the kindest reception and hospitality. "He found the men, the country and the products, equally admirable. It is somewhat curious that he does not mention his discovery of pearls to the Catholic Monarchs and he afterwards makes a poor excuse for this. The reason I conjecture to have been a wish to preserve this knowledge to himself, that the fruits of his enterprise might not be prematurely snatched from him. His shipmates, however, were sure to disperse the intelligence; and the gains to be made on the Pearl Coast were probably the most tempting bait for future navigators to follow in the tract of Columbus and complete the discovery of the earthly Paradise."

The natives cultivated maize, cassaba and cotton, weaving the latter into clothing, hammocks, and other articles of utility. They even manufactured a sort of wine, or beer, from the maize. "The trees descended to the sea. There were houses and people and very beautiful lands which reminded him (Columbus) from their beauty and their verdure, of the gardens, or huertas, of Valencia in the month of May." Not only this, but the lands were well cultivated, muy labrada. "Farms and populous places were visible above the water

⁴ F. G. Squier, in *Century Magazine*, 1890, p. 890.

as he coasted onwards; and still the trees descended to the sea—a sure sign of the general mildness of the climate, wherever it occurs.” . . . “The expedition proceeded onwards, anchoring in the various ports and bays which there are on that coast, until it came to a very beautiful spot, near a river, where there were not only houses, but places of fortification. There were also gardens of such beauty that one of the voyagers, afterwards giving evidence in a lawsuit connected with the proceedings on that coast, declared that he had never seen a more delicious spot.” (Helps, II, 113.)

Upon this happy shore, at Paria, Columbus landed in 1498, setting upon it that great cross which was the symbol of the sovereignty claimed by him for Ferdinand and Isabella, and should have also been that of hope and salvation for the natives. But from the moment of its erection everything changed for the worse. The first enquiries of the admiral were for gold; the next for pearls. The proceeds of his voyage in these coveted objects did not in the end amount to much, but they served to stimulate other adventurers. In December of the same year the news of his discovery reached Spain; in the following May, Alonso de Ojeda, started with an expedition from Spain with the object to exploit this beautiful land. A few days later another expedition started with the same object, led by Per Alonso Niño and Christóbal Guerra. This last one came to the island of Margarita (Pearls) where they procured some pearls in exchange for glass-beads, pins and needles. At Mochima they obtained in an hour 15 ounces of pearls for trumperies that cost in Spain but 200 maravedis. At Curianá, on the Main, they met with “the most gracious reception, as if it were a meeting of parents and children.” The houses were built of wood and thatched with palm leaves. Every kind of food was abundant—fish, flesh, fowls, and bread made of Indian corn. Markets and fairs were held, in which were displayed all the bravery of jars, pitchers, dishes, and porringers of native manufacture. But the Spaniards cared nothing for these, only for those fatal ornaments of “gold made in the form of little birds, frogs and other figures, very well wrought.” When the strangers, with affected carelessness, asked where “that yellow dirt” came from, they were told Cauchieto, some forty leagues off. Securing what gold they could obtain at Curianá, the adventurers voyaged to Cauchieto, where they found that pearls were dear and gold was cheap. At Chichiribichi, a place near the present port of La Guayra, Alonso de Ojeda had anticipated them, by attacking and plundering the natives, who did not receive Niño’s expedition with the usual amiability. Return-

ing to Curianá they found such a supply of pearls ready for them, some as big as filberts, that they purchased as much as 150 marks weight, at a cost of not more than ten or 12 ducats worth of trinkets. In February, 1500, this expedition returned to Bayona in Galicia, "the mariners being laden with pearls as if they were carrying bundles of straw." In a few months time the news spread all over Spain and flowed back to Hispaniola. An expedition at once started from that island, which occupied the sterile islet of Cubagua, between Margarita and the Main. There was conducted that pearl fishery which afterwards gave its name to the Coast of Terra Firma.

Thus far there had been comparatively little friction between the Spaniards and Indians, but Hispaniola, now nearly depopulated of the natives by the rigours of the gold mines, was too much in need of new victims and too near to Terra Firma, to induce the Spaniards to forego the advantage of kidnapping the inhabitants of the Main. In 1512 they carried off a cacique, with 17 of his men, to the mines of Hispaniola. This cruel and treacherous act was avenged by the Indians, who, after affording the Spaniards an ample opportunity to return the captives, put to death the unhappy Dominican monks who had erected a pioneer mission on the Main. In 1518 the Franciscans and Dominicans of Hispaniola, nothing daunted by the fate of their brethren, erected two new monasteries on the Pearl Coast, the Indians receiving them kindly. Scarcely had these amicable arrangements been made when a Spaniard named Alonso de Ojeda—not the one previously mentioned—started from Cabagua to kidnap natives on the Main. Four leagues beyond the monasteries, at a place on the coast named Maracapána, Ojeda treacherously attacked a band of 50 Indians, whom he had employed to carry maize; and after slaughtering a number of them, carried the remainder away in slavery. This act roused the natives of the coast to fury. They attacked the monasteries, dispersed its inmates, tore the emblems of their religion into shreds and killed 80 of their companions. Not content with this, they started for Cubagua, where there were 300 Spaniards getting rich with the pearl fishery, put the latter to flight and plundered their mushroom city of New Cadiz. When this news reached St. Domingo a punitive expedition, under Ocampo, was organized to chastise the Indians. Having discharged this mission with cruel fidelity, Ocampo made use of the occasion to secure a large number of slaves, "carrying his incursions into that mountainous country, the abode of the Tegares," a place south of the present city of Caraccas.

It was in the midst of these scenes that the benevolent Las Casas

made that memorable but vain attempt to establish peace and the Christian religion upon Terra Firma. The Indians were docile and willing enough, but the Spaniards wanted gold and slaves, objects which were irreconcilable with either peace or religion. Even the subordinates of the clerigo could not forego these temptations; and taking advantage of his absence in St. Domingo, his lieutenant, one Francisco de Soto, "sent away the only two boats the colony had, to traffic for pearls, gold, and even for slaves." The result was another rising of the Indians, the destruction of the mission and the dispersion of the Dominicans. When intelligence of these occurrences reached Las Casas, he lost heart and retiring to a convent, renounced the Christian world forever.

Freed from the restraint which this worthy man and reformer had imposed upon their cupidity, the Spaniards now commenced in earnest that dread work of devastation which eventually rendered this once smiling land a desert. In 1522 Jacomé Castellon "fought the Indians, recovered the country, restored the pearl fisheries and filled Cubagua and even St. Domingo with slaves." (Gomara, *Hist. Ind.*, c. 78.)

By the year 1541 the pearl fishery had ceased entirely, or else had ceased to be productive, and we now again hear of El Dorado, which was the name mentioned by the governor of Cubagua as that of an interior province of Terra Firma, where gold and slaves were to be had in plenty. In the same year an expedition with these objects in view was started from Cubagua under the leadership of Ortal, which moved eastward along the coast and there "commenced a hunt, that led the Spaniards through the wildest tract of country which Belzoni, (who was present and writes the story,) thinks that foxes would have hesitated to enter. The cruel hunters, like wild beasts, made their forays more by night than by day, and in the course of a march of a hundred miles they succeeded in capturing 240 Indians, males and females, children and adults." Returning to the coast, the Spaniards adopted another mode of planting religion and civilization in El Dorado. "When the Indians came down to fish, the Spaniards rushed out of their hiding places and generally contrived to capture the fishers, who appear to have been mostly women and children." (Belzoni, *Hist. Novi Orbis*, I, ii.)

One of these expeditions after travelling 700 miles returned to Maracapána, bringing no fewer than 4,000 slaves. These represented but a portion of the natives who were torn from their homes; for many of them, who were found to be unequal to the journey, were

put to death on the road. "That miserable band of slaves," wrote Belzoni, "was indeed a foul and melancholy spectacle to those who beheld it; men and women debilitated by hunger and misery, their bodies naked, lacerated and mutilated. You might behold the wretched mothers lost in grief and tears, dragging two or three children after them, or carrying them upon their necks and shoulders, and the whole band connected together by ropes or iron chains around their necks or arms and hands." These unhappy victims were carried to Cubagua, where a fifth of their number was taken for the king of Spain and branded with the initial of his name, King Charles the First of Spain and the Fifth of Germany, both of glorious memory. "The great bulk of the captives were then exchanged for wine, corn and other necessaries; nor did these accursed marauders hesitate to make a saleable commodity of that for which a man should be ready to lay down his own life in defence—namely, the child that is about to be born to him." (Helps, quoting the words of Belzoni.)

Such were the crimes committed in El Dorado to obtain the gold of Hispaniola and St. Domingo. When Columbus first visited the Coast of Terra Firma, namely, in 1498, it was a scene of fertility and happiness. "When I came there," says Belzoni, in 1541, "it was nearly reduced to a solitary desert." Yet less than 300 miles from the scene of this wickedness lay one of the richest gold mines that the world ever saw, the "Callao." But the Spaniards did not visit El Dorado to prospect or dig for gold; they came to plunder gold and to extort it from slavery.

The only region of Terra Firma which, down to the present time, has proved to contain gold in any considerable quantity and accessible to the natives, before the introduction of European arts, that is to say, placer gold, is in Venezuela (or Guiana) in the valley of the Cuyuni, an affluent of the Essequibo. This is the territory in dispute between Venezuela and Great Britain, the origin of the so much vaunted arbitration treaty of 1897. The air is humid, the climate is fatal to whites, and for their labour the Indians demand sixty cents to one dollar, or 2s. 6d. to 4s. per day in gold, beside certain allowances of food and raiment. The total product at the present time is about one million dollars a year, at a cost of about one and a quarter millions.

Whilst exploring the countries of the Upper Orinoco in the early part of the present century, Baron von Humboldt was informed that the placers of that region were "the classical soil of the Dorado of Parima." This is quite possible.

The "Callao" mine is in the Caratal district, department of Roscio, State of Guiana, Republic of Venezuela. The district is about 160 miles E. S. E. of Ciudad Bolivar, or Angostura, on the Orinoco, and it contains, besides the "Callao," numerous other quartz mines, most of which, although productive, have failed to be profitable. The mines, whose surface had long been worked as placers, were opened for quartz about the year 1866. Commencing in that year with a product of 15,000 ounces, this gradually increased in 1880 to 130,000 ounces, about one-half of the whole product (900,000 ounces) having been obtained from the "Callao" alone. According to the Report of the British Consul at Ciudad Bolivar, for 1880, gold is the chief and, it may be said, almost the only industry of the State of Guiana, on which both public and private incomes more or less depend. "Absorbing, as it does, almost all the labour of the state, by offering superior inducements to labourers, it renders every other enterprise hopeless. Gold-mining is the sole pre-occupation of all minds. In this vice-consular district, as an industry, it only dates, it may be said, from 1866, when companies were formed for working this hitherto undeveloped source of wealth. But whether from the enormous expenses which have been incurred in importing and setting up suitable machinery, the transporting of it to Caratal, a distance of about 150 miles from Port Las Tablas, by bullock-wagons, or the exceptional dearness of labour, provisions, and fuel, which latter has to be procured from the adjacent forests at great outlay, for the working of steam machinery, the fact is that until now, only one, the Callao Company, has returned dividends to its shareholders." Since the year above mentioned, the produce of the district has greatly declined.

CHAPTER IV.

MONEYS OF THE NORTH AMERICAN TRIBES.

Moneys of the Mound Builders—Engraved or stamped moneys of lignite, bone, terra cotta, gold, silver, lead, copper and other substances—Skin or parchment money—Copper mines of the Mound Builders near Lake Superior—Inscribed copper bars of the Brazilian Guarani—The venatic tribes of America did not employ money—Mysterious fate of the Mound Builders.

MENTION is elsewhere made of the moneys employed by the Aztecs and other civilized races of Mexico, Central and South America. Races belonging to a scarcely lower civilization than the Aztecs, certainly far more advanced than the venatic tribes of the North and East, must have occupied at some remote time and for a lengthy period, a considerable portion of the Mississippi Basin; for we find their remains scattered all over that vast bed of alluvium, from Ohio to Louisiana and from Ohio and Tennessee to Arkansas. These remains consist of earth-forts, mounds, tumuli, barrows, irrigation-canals, ditches and mines and their various contents. They are of a character and extent which indicate their constructors to have been an agricultural and commercial people, acquainted amongst other arts with letters and the use of money. The moneys employed by these people at various times may conveniently be arranged under the following principal classes:

I. Lignite and coal money; round; diameter from about $\frac{7}{8}$ to $1\frac{1}{4}$ inches; and in thickness about $\frac{1}{4}$ of an inch. These were generally plain; but many of them were engraved on one side, sometimes with parallel lines; at others with dots; varying in number from four to 16 in the specimens copied by Dr. Dickeson. Others were engraved with scroll-work, figures of men, birds, frogs, etc.

II. Ivory and bone money. Six hundred and fifty pieces, somewhat resembling button-moulds, from $\frac{3}{8}$ to $\frac{5}{8}$ of an inch in diameter and from the thickness of pasteboard to $\frac{1}{4}$ of an inch, were found in Grave Creek Mound, near Wheeling, Va., whilst in another mound upwards of 1,700 ivory pieces were found. All of these were regarded by Dr. Dickeson as pieces of money.

III. Terra cotta money; round; diameter about $1\frac{1}{8}$ to $1\frac{3}{4}$ inches, and in thickness from $\frac{1}{8}$ to $\frac{1}{4}$ of an inch. They were commonly stamped on one side with parallel lines, dots, triangles, rings, letters, scrolls and other devices.

IV. Stone money; usually of sandstone or slate, diameter from $\frac{1}{2}$ an inch to 8 inches. Devices similar to those on classes I and III. The remarkable stone, with an inscription in the "Rock alphabet," alluded to below, has been included in this class.

V. Gold coins about $\frac{3}{4}$ of an inch in diameter; round; rough-edged; weight about 48 grains. On one of these coins, found in the hand of a skeleton buried in Ross County, Ohio, the device was four waving parallel lines. A similar specimen was found in a mound at old Fort Rosalie, near Natchez, Miss. A third one was found in Perry County, Ohio, with the device of a man and bird on each side.

VI. Similar coins of silver.

VII. Galena coins. These were lumps of irregular roundish shapes, covered with hieroglyphics.

VIII. Copper coins, similar in size and type to those of gold and silver.

IX. Pieces which may have been used as money composed of various substances, such as lead, mica, shells, pearls, carnelian, chalcidony, agate, jasper, fossil encrinites, or stone lilies, &c.

X. Scylates, or concavo-convex copper discs.¹

XI. Beaver and marten skins, in the Lake regions of North America. The later venatic tribes are known to have used these as commodities for the purposes of barter; and it seems quite likely that the earlier agricultural nations also used skins for money, that is to say, inscribed skins, whose efficacy depended not upon the value of the skins, as such, but upon the credit of the community or state and the limit assigned to their emission; as in China, Novgorod and Wessex, during the ninth century of our æra.

The order in which these various moneys are mentioned herein has no ascertained relation to the order of time in which they were actually employed. Of this we know nothing. It may be conjectured that terra cotta and ivory or bone moneys preceded gold, silver and copper coins, and that the irregular supply and increasing scarcity of the latter, compared with the growing demand for them, created such obstacles to trade that the community degenerated to barter, lost its social bond and consequently its military ascendancy, and eventually fell a prey to the surrounding tribes of hostiles; just as

¹ Smithsonian Report, 1876.

Rome, under a metallic system, fell beneath the power of nations whom she had easily repelled when her nummular system was in vogue. But such a conjecture must go for what it is worth. All we know is that the remains include all these species of money. We have as yet no clue to the history of them. Some of the specimens were formerly in Peale's Museum; others were in the possession of Dr. Dickeson, who published drawings or fac-similes of them; while still others remain in the private collections of archæologists. They should all be brought together by the government and deposited in the Mint Collection at Washington.

In the early portion of 1897, native copper workings of great antiquity were discovered about 20 miles from the head of Gitche Gumeé, the Big Sea-water of Indian legend and the Lake Superior of to-day. The following is from a professional report on these workings:

“That this region was resorted to by an ancient race for the purpose of producing copper, long before the coming of the white man, is evident from the numerous memorials scattered throughout its extent. Whether these ancient miners belonged to the race who built the mounds on the Upper Mississippi and its affluents, or were the progenitors of the (venatic) Indians, is a matter of conjecture.

“The evidences of early mining consist of numerous excavations in the solid rock; heaps of rubbish and earth along the courses of the veins; remains of copper utensils fashioned into knives and chisels; stone hammers, some of which are of immense size and weight; wooden bowls for bailing water from the mines; and numerous levers of wood, used in raising the masses of copper to the surface.

“The high antiquity of this rude mining is inferred from the fact that the existing race of Indians have no traditions by what people or at what time it was done. The mines were even unknown to the eldest of the band, until they were pointed out by the white man. It is inferred from the character of the trees growing upon the piles of rubbish, between which and those of the surrounding forests no perceptible difference can be detected; from the mouldering state of the wooden billets and levers; from the nature of the materials with which these excavations are filled, consisting of fine clay enveloped in half-decayed leaves; and from the bones of the bear, the deer and the caribou; that the filling-up resulted not from the action of temporary streamlets, but from the slow accumulation of years.

“These evidences are observed in this location for a distance of two miles. Upon a mound of earth we saw a pine stump, broken fifteen feet from the ground, which was ten feet in circumference, and which must have grown, flourished and died, since the earth in which it had taken root was thrown out. We counted 395 annual rings on a hemlock growing under similar circumstances, which we felled near one of these shafts. Thus it would appear that these mines were worked before Columbus started on his Voyage of Discovery. The

amount of ancient hammers in the vicinity exceeded ten car loads.

"Father Allouez, after whom Allouez Bay on Lake Superior is named, a Jesuit missionary, said: 'There are often found beneath the waters of Lake Superior pieces of copper, well formed and of the weight of 20 pounds. I have seen them in the hands of the Indians; and, as the latter are superstitious, they keep them as so many divinities, or as presents from the gods beneath.' The fact that ingots of copper have been found on the bottom of Lake Superior indicate that this ancient race not only possessed the skill to mine copper but were also a commercial people who navigated the lake."²

In this connection it might be added that inscribed copper bars about eight inches long and one inch in diameter have been found in Brazil and are there believed to have been used by the Guranís, an agricultural and trading people. A fac-simile of one of these was given to the author by the Director of the Mint at Rio Janeiro in 1882. The characters resemble Phœnician. It should also be stated that both in North America and Mexico, copper, before the Spanish Conquest, was more valuable than gold.³ Such may also have been the case in Brazil.

Among the native communities who were found in America at the period of the Discovery, only the Mexicans, Peruvians, Chimays and Chibchas are known to have used money. In neither case was the current money of gold or silver, although the precious metals existed in their countries in the greatest abundance, and one of them, gold, was produced by the natives and lavishly used for purposes of ornament and even for articles of utility. It is quite possible, and indeed probable, that the Natchez Indians used some sort of money; but we have no positive knowledge of it. The remaining tribes of America did not employ money until after they came into contact with Europeans. The tribal Indians were not agriculturalists nor traders; there was no division of employment among them; there was no community, no government, no social bond; each man or each family lived and acted independently; the nearest approach to the social state was the family tie, clanship; its sign being the totem. Even this tie was but a frail one and was often ruptured. Yet some writers have gone so far as to assert that the venatic tribes of America did employ money before the arrival of the whites, and that such money was the well known wampum-peag. This is a subject that will be discussed more at length in a future chapter. As to the rings noticed in the Smithsonian Report for 1863, p. 322, these were probably brace-

² Chicago Times-Herald, about July 1, 1897.

³ Sir Arthur Helps, "Conquerors of America;" Smithsonian Report, 1876.

lets and not money. There is no communal stamp upon them, no mark of public authority, nor no such peculiarity of shape or design as, in the absence of a stamp, would confer upon them the character of money.

The authorities for regarding the various objects above enumerated as moneys of the aborigines, are Dr. M. W. Dickeson, in his *Numismatical Manual*; Schoolcraft and Dickeson's descriptions of the North American mounds; the Smithsonian Reports; the Southern Magazine; and Squier's Travels. Dr. Dickeson examined the contents of no less than 1,033 ancient mounds in the Mississippi Valley. The letters on the oval stone found in Grave Creek Mound, alluded to above in Class IV, resemble the Phœnician. ⁴

The remains of the Mound Builders fail to disclose what fate befell them, whether, as above surmised, they were weakened by social decay and were annihilated by the savage tribes who surrounded them, or they were driven south to the Deserts of New Mexico, or absorbed in the civilized populations that tenanted the Valley of the Anahuac. In the present state of discovery, we only know that the Mound Builders were once a mighty nation who practised agriculture, pursued trade, and employed money.

⁴ Dickeson, Num. Man., pl. II, fig. 15.

CHAPTER V.

THE SEVEN CITIES OF CIBOLA.

Marvellous story of Cabeza de Vaca, 1527—Expedition of Father Marcos, 1539—It catches sight of Cibola and returns with great news to Mexico—Preparations of Cortes, Mendoza and Alvarado to subdue and plunder Cibola—Expedition of Coronado, 1540—Tatarrax, the golden cross and the Queen of Heaven—Coronado reports the country a desert and the Seven Cities as worthless.

STRANGE reports reached the City of Mexico, about fifteen years after its conquest by the Spaniards, respecting the unknown countries which lay to the north and northwest. Those as yet undiscovered regions were supposed to abut upon the kingdoms of India, and were said to contain not only rich and populous nations and splendid cities, but also mountains of gold, silver, and precious stones, oceans of pearls, islands of Amazons, mermaids, unicorns, and all the marvels which for centuries had played a part in the fables and romances of Europe. The conquerors, even though in the presence of the glories of Tenochtitlan, believed they had entered merely the *threshold* of the wealth and splendour of the New World, and that the true Dorado lay in the far North beyond. To their excited imaginations everything assumed a golden hue, the vague accounts of the country given by the Indians grew more and more exaggerated with every repetition as they passed from mouth to mouth, and not only the soldiers, but even the great Cortes himself felt firmly convinced that in the unknown North there were nations whose wealth and splendour as far exceeded that of the Aztecs as those of the Aztecs exceeded Hispaniola and Cuba.

But strange as were these reports, on account of their romantic character and the avidity with which they were caught up and credited, they were much more so on account of the substratum of truth which underlaid them. This points in the direction of the territories since called California, Arizona and New Mexico, the territories which have since been found out to be the true Dorado, the territories which, as the world now knows, are the true land of mineral wealth. It points especially to cities large and populous, cities of splendid and

extensive buildings, cities far advanced in civil polity; where we now find spread over vast tracts of country immense ruins, which, even in their loneliness and desolation, still bear eloquent testimony of former grandeur and magnificence. By degrees, as further and further discoveries are being made among these ruins, our attention is being more and more attracted to the ancient reports; and when we come to compare recent developments with what have hitherto been regarded as only the heated fancies of the old Spanish explorers, the facts demand at our hands a much ampler justification of Cortes and his companions in their reception of, and belief in, these marvellous stories, than has ever yet been vouchsafed to them.

Among these stories the strangest were concerning the Seven Cities of Cibola, or the *Septem Civitates*, as they were called by the Latin-speaking priesthood of the day. The exact situation of these famous cities was not pointed out; but in all the ancient maps, however general and defective in other respects, they were invariably designated, and given "a local habitation and a name." In some, they were represented as rearing their giant towers where the then unknown Bay of San Francisco ought to have been; in others, as lying at the head of the California Gulf, and in others as more nearly in the centre of the great sandy wastes, like Palmyra in the desert. However erroneous, and at whatever times these maps may have been made, they all exhibited the Seven Cities, or the *Septem Civitates*, as if they were as well known as the cities around the Lake of Tescuco.

Cortes, as is well known, sent several expeditions, one of which he accompanied in person, in search of the splendour and wealth which were thus believed to exist in the far northwest. The story of these expeditions is told in most of our histories; but it is omitted to be told in them how, though all his expeditions proved unsuccessful and unfortunate, his confidence in the wealth of the country remained unbroken and undiminished. Though he had seen for himself the bare and rugged mountains of the Californian peninsula, and their wretched and savage inhabitants, he yet believed that the Dorado which he sought, though it might be distant, still lay in that direction. And in this belief many of the adventurers of the then New World participated. If we could suppose that they actually knew only a small portion of the truth, we might well imagine how they revelled in their anticipations of the magnificent countries and illimitable treasures open to their conquest. If we could suppose that they had obtained only a few nuggets from the Californian placers, we might well appreciate how richly prepared were their minds for

the marvellous stories, which, as narrated by the old Spanish chroniclers, reached Mexico in the year 1536.

The bringers of these stories were Alvaro Nuñez Cabeza de Vaca and his companions, Alonzo de Castillo, Andres de Orantes, and a negro called Estevanico, the last of whom, by the way, is one of the first of his race named in American annals. These persons, according to the reports they gave of themselves, were of the unfortunate expedition, conducted by Panfilo de Narvaez, into Florida, in the year 1527. Managing to escape the death which their leader and comrades suffered, they found means, by persuading the Indians that they possessed miraculous powers for healing sicknesses, to subsist. Several fortunate recoveries under their hands gave colour to their pretensions. They passed from tribe to tribe, and gradually, after wandering for nine long years, reached the Pacific and at last made their way to Mexico—being thus the first Europeans who crossed the continent north of the tropics. In narrating their adventures they assured their wondering listeners that the interior of the country through which they had passed was full of various nations; that they themselves had seen much wealth in the shape of arrow-heads of the finest emerald, and big bags of silver; and that they had heard of many peoples, living further north, who possessed great cities and abundant riches. These reports, sustained as they were by the credit of Cabeza de Vaca, confirmed the Spaniards in their previously somewhat vague belief in the wealth of the northwest, and not only induced Cortes to continue his exertions, but attracted the enterprise of others, who, it might be supposed, would have been the last to engage in visionary schemes or mere romantic adventures.

One of these latter was Father Marcos de Niza, a Franciscan priest and provincial of his order. He was regarded as one of the most solid and substantial men in the New World, but he became so much animated by the reports of Cabeza de Vaca, that, without considering personal risk and inconvenience, he determined at once and almost alone to explore those wonderful countries, and reap the early harvest of uncounted wealth, as well as of regenerated souls, which they promised. Accordingly, having secured the services of the negro Estevanico as a guide, and a number of Indian interpreters, he set out for Culiacan, the most northern of the Spanish settlements on the Pacific, in March, 1539. He travelled first a hundred leagues northwestward along the eastern coast of the Gulf of California, and reached, and in four days crossed, a desert. This brought him to a country where the natives had no knowledge whatever of the Chris-

tians, and believed him a Man come from Heaven. They placed before him provisions in great quantities, and touched his priestly robes with reverence. In answer to questions concerning the countries beyond, they told him there was a valley among the mountains, four days' journey eastward, where the people possessed large vessels of gold, and wore ornaments of the same in their ears and nostrils. Father Marcos determined to visit this valley on his return, should it prove worth his while; but upon the present occasion, without turning aside, he continued his journey northward, and in four days further, came to the town of a nation called Vacapas. It was now the time of Easter, which his profession required him to pass in quiet and religious exercises; and he accordingly made arrangements to tarry among the Vacapas for a week. Having an eye to business, however, and apparently regarding his companions as mere Gentiles, excluded from the pale of salvation and not in need of the same religious recreation as himself, he divided them into three parties, and sent them out north, west and east, with instructions to explore the country and bring him back intelligence of their discoveries. It was only a few days after they had gone when he was surprised with great news. Estevanico, who had gone northward, sent back intelligence of a great country, thirty days' journey further north, towards which he was advancing as fast as he could go, and requesting Father Marcos to follow as speedily as possible. This country, Estevanico informed him by messengers, was called Cibola, and it embraced, or consisted of, seven great and magnificent cities, whose houses, built of stone, several stories high, with portals adorned with turquoises, were disposed in streets, and whose inhabitants were under the government of one supreme king. Soon afterwards, the party, which had gone westward, returned with word that they had found the sea forty leagues distant at a place where there were thirty-four islands near the coast, and many people bearing shields of leather beautifully figured; and about the same time the party that had gone eastward also returned, bringing three Indians of a tribe who painted their arms and breasts, and were therefore called Pintados. At first it was supposed that the bringing in of the Pintados was a matter of small account; but upon questioning them they said they had travelled and knew the country, and among other places they had seen were the great cities of Cibola, which they described, and in all respects confirmed the reports of Estevanico regarding their grandeur and magnificence.

Father Marcos now bade farewell to the hospitable Vacapas, and

continued his journey northward. In three days he was met by another messenger from Estevanico, who brought still further and more glowing accounts of the greatness and wealth of Cibola. Further on he heard that, besides the Seven Cities, there were three great kingdoms situated in the north, called Marata, Acus, and Totonteac, the people of which wore ornaments of precious stones in profusion. Still further on he found a great Cross, which Estevanico had erected in token that the prospects of great discoveries brightened as he advanced. Cheered by these hopeful indications, Father Marcos hurried along and passed through a country which was artificially irrigated and very productive, where the people were clothed in cotton and wore turquoise necklaces. He then crossed a second desert, and came to a populous and well irrigated valley, inhabited by a people whom he says were white, where he found that the Seven Cities were as well known and as much spoken of as the City of Mexico in New Spain. Hearing at this place that the sea was not far distant, he turned aside, and discovered what he supposed to be the Ocean in the neighborhood of the 36th degree of north latitude—the parallel of Tule Lake and Santa Fé—a supposed discovery, in which the worthy Father was probably deceived by some mirage of the desert, mistaking it for a portion of the fabulous Straits of Anian. Again pursuing his northerly course five days further, Father Marcos met a fugitive from Cibola, who gave him still further information concerning the Seven Cities, their form and appearance, and also of the kingdoms of Marata, Acus, and Totonteac, their people, their cities built of stone and lime like those of Cibola, and their riches. It was about this same time that a skin was brought in said to belong to that famous animal, the unicorn, which the worthy Father informs us was one and a-half times larger than an ox, having hair the length of a finger, and of the color of a he-goat, and possessing a single horn curving down from the forehead upon the breast, and giving off a single prong, in which there was great strength and power. In the meanwhile further intelligence came from Estevanico that he was travelling with all possible despatch towards the Seven Cities, in company with 300 natives who had joined him; that so far as he had travelled he had found no deceit in the Indians, and that therefore full credit was due to all they said about the rich countries to which he was leading the way. And to this commendation Father Marcos assures us he could add his own testimony "that in the 112 leagues he had journeyed since first hearing of Cibola, he had always found them truthful and trustworthy."

Father Marcos was now, May 9, 1539, within 15 days' journey of Cibola. The remainder of his way was a desert, over which he travelled 12 days, and consequently arrived within three days of Cibola, when the melancholy intelligence reached him of the barbarous and inhuman inhospitality of the Cibolans, and the massacre of Estevanico and all his friends. The tragic news was brought by an Indian, who said "that Estevanico, when within one days' journey of Cibola, had sent forward messengers to the governor with presents of strings of bells and coloured feathers; that the governor, upon their approach, flew into a great passion, flung the presents into the fire, and said he knew the people from whom they came, and that should they enter Cibola, they should surely all be put to death; that Estevanico, notwithstanding this threat, persuaded his companions they would still be well received; that accordingly they all proceeded to the city, which, however, they were not allowed to enter; but, after being stripped of everything they carried, they were imprisoned in a large house, and the next day the people of Cibola fell upon and massacred them."

It was difficult at first to credit this evil report; but soon afterwards two of the Indians who had accompanied Estevanico, and who had escaped the massacre, arrived and confirmed it in every particular, adding "that they themselves had only escaped by hiding among the dead bodies of their companions until after night-fall." The account of so great a disaster, thus brought and thus confirmed, at a moment when his imagination was worked up for far other intelligence, so confused and so horrified Father Marcos that for a long time he knew not what to do. He, however, like a good Christian as he was, eventually composed his mind to patience, and retired apart to pray and commend himself to God. But alas, his absence only added to his troubles. Upon his return a new cause of danger and inquietude stared him in the face. The Indians, who had escaped the slaughter, having leisure to discuss their situation, came to the conclusion that he was the cause of all their misfortunes, and conspired to put him to death. It was an occasion upon which such a man as Cortes would have exhibited some master-stroke of policy as a soldier; Father Marcos acted simply as a priest and missionary. He ordered all his merchandise and trinkets to be brought forth, and, after dividing them among the Indians, informed them "that they would now gain nothing by his death, and that should they kill him, the Christians would surely avenge his death." And thus he saved his life. By the effect either of his words or of his liberality, the Indians were appeased, and made no attempt to put their threats in execution.

Father Marcos, finding himself thus delivered from imminent danger, and considering that he might safely see, even if he could not visit, the great object of his search, continued his journey with the few companions who still remained faithful; and the next day, upon ascending the ridge of a mountain, came within view of the famous Cibola. Glorious was the sight now presented to his eyes. Far below him, in a plain among the hills, within a short distance of each other, lay the Seven Cities, shining in the sun; with their long streets of stone houses several stories high and flat-roofed, and darkened by a population more numerous than that of Mexico. No wonder Father Marcos, upon beholding this beautiful sight, and gazing down upon it long and earnestly, was tempted to descend and enter the forbidden precincts; but remembering that if he were killed no one would carry back the news of his discoveries, he wisely refrained. He contented himself with setting up a great pile of stones, surmounted with a cross, and thus claimed possession of the whole country of Cibola, and of the kingdoms of Marata, Acus, and Totontecac in the name of his friend and patron, Don Antonio de Mendoza, Viceroy and Governor of New Spain, for the Crown of Castile and Leon. Having thus made his discovery, and convinced himself, with his own eyes, of the existence and magnificence of the Seven Cities, Father Marcos set out upon his return. On his way back he turned aside at the golden valley, of which he had heard on his outward journey, and approached near enough to see its towns and people, of which he also took nominal possession, and erected a Cross as he had done at Cibola. He then hastened to Culiacan, and thence to Compostella, the capital of New Galicia, whence he sent advices of his discoveries to Mexico.

The report of this journey, as might be supposed, filled all New Spain with novelty and excitement. There was enough of uncertainty about it to give free scope to the imagination, and enough of truth, we may well believe now, to convince the reason. It sounded almost like a fairy tale, and yet it was told by a Father of the Church. Now, at least, it became probable that all the discoveries and conquests hitherto made in the New World would be eclipsed. Nothing now was thought of but Cibola. Every man partook of the absorbing enthusiasm, from the old captain, who had seen the Aztecan and Toltecan capitals in their pristine magnificence and was now enjoying his *repartimientos* and revenues, down to the half-clad recruit, last come from Europe in search of employment and fortune. Even the cautious Mendoza and other officers of government were inspired with the

same ardour, while on the mind of Cortes, being, as it was, the proof of his long settled belief in the wealth and splendour of those distant regions, it must have produced a profound effect.

The conqueror, who by his emperor had been named Captain-General of New Spain and of the coasts of the South Sea, held the right, according to the terms of his *capitulacion*, of making discoveries and conquests of all countries in the New World beyond the jurisdiction of other Spanish governors. He had already built many ships and spent vast sums in projects directed towards the countries of the northwest, the very ones into which Marcos de Niza had penetrated. But he now found two great rivals, whom the reports of the wealth and splendour of the Seven Cities induced to enter the field against him. One was Mendoza, the Viceroy, who laid claim to the new countries in right of his office and of the possession taken of them in his name. The other was Pedro de Alvarado, governor of Guatemala, who had recently managed to obtain a commission to make discoveries, and was now preparing an armament beyond anything which had ever appeared in the Pacific.

From one end to the other, New Spain now resounded with the noise of preparation; recruits were gathered, arms furbished, stores collected, and everything got ready for the march. Cortes, Mendoza, and Alvarado, each in his own sphere, pushed on their projects; but Cortes, with that celerity of movement peculiar to his genius, far outstripped his competitors. Long before they were ready to start, he equipped a great fleet and dispatched it up the northern coast under the charge of that most faithful and perhaps most deserving of his officers, Francisco de Ulloa. Ulloa completely explored the Gulf of California, weathered Cape San Lucas, and ran up along the western coast of the peninsula, till meeting heavy weather in the northern seas, and finding his crew disaffected, he turned about. On his return, when almost within sight of the port from which he set out, he was basely assassinated by one of his soldiers, and his fleet scattered, without having either seen or heard anything further of the Seven Cities. In the meanwhile Alvarado, the Murat of those times, before he was ready to take his final start, was killed by a fall from his horse, and his enterprise also broken up. Mendoza, on the contrary, succeeded in sending a force to the new country, consisting of 150 horsemen, 200 infantry, and some light pieces of artillery, under the command of Francisco Vasquez de Coronado, governor of New Galicia. The leader of this expedition appears to have been a man of cold disposition, with not a spark of enthusiasm or romance in his

composition. One cannot help thinking him a methodical and careful soldier, and undoubtedly he was an able leader; but the reader of the old chronicles in which his exploits are recorded can hardly thank him for his strange incredulity in a land so full of wonders; and the Spanish nation may attribute to him, in great part, the non-development, and perhaps the subsequent loss, of the richest mineral territory on the face of the earth.

Coronado set out from Culiacan on April 22nd, 1540, with the express design of conquering the Seven Cities, and all the countries in that part of the world. When he reached the neighborhood of the valley among the mountains, which Marcos de Niza had reported to be full of gold, he sent off a detachment of horsemen to reconnoitre it. They did so, but brought back cold comfort. He assures us they found neither cities, nor gold, nor anything, but a few Indians, who lived upon maize, beans, and calabashes, and in warfare used poisoned arrows, with which they killed several of his soldiers. He thereupon continued his march; taking, however, a somewhat different route from that pursued by Marcos de Niza; for he crossed several mountain chains and two rivers, one of which he called the San Juan, and the other the Balsas. In the course of a month or more, having passed over countries diversified with deserts, fruitful valleys, mountains and plains, in all of which there was nothing to attract his attention, he at last stood, with his army, before Cibola—Cibola the famous, Cibola the renowned! The imaginations of all had been raised to the highest pitch by Marcos de Niza's account of his reconnaissance of this renowned locality from the mountains. But all that Coronado could now see was a few small towns, consisting of houses built, indeed, of stone, and having flat roofs, but peopled with only a few hundred miserable inhabitants. He admits that the country was delightful, and the soil fruitful; but he intimates, and indeed virtually declares, that the narrative of Marcos was a fable. He, Coronado, could find nothing worthy of conquest, nothing to attract emigration, nothing to justify settlement. The country was remote; and there was in it neither civilization, nor splendour, nor wealth, nor turquoises, nor precious stones, nor silver, nor gold.

Coronado was of too unimpressive and too unimaginative a nature to observe objects of scientific or historical interest; and, not finding the expected wealth, he contemptuously turned his back upon the Seven Cities and proceeded in search of Marata, Acus, and Totontec. These towns, when he reached them, he found to be similar to those he had just left. But one important fact he could not help noticing, and

this was that all the streams which he came to ran towards the Gulf of Mexico. One of these in particular, the largest he saw, he followed twenty leagues towards its source, and in that short distance passed fifteen towns. He appears to have travelled eastwardly and northwardly, after leaving Cibola, for nearly three weeks, and at length arrived at a country where the plains, as far as the eye could reach, were black with herds of buffaloes, so crowded together that his troops could scarcely pass. Here he heard of Quivira, a country still further north, governed by Tatarrax, a hoary-headed, long-bearded king, said to worship a Golden Cross and an image of the Queen of Heaven. To this venerable monarch Coronado now determined to pay his respects; and, after travelling a whole month northward in search of him, at length arrived at his dominions. But these, though they exceeded Cibola in fame, proved also quite as unimportant and inconsiderable. Nothing found favour in the eyes of Coronado—neither the country, the vegetation, the animals, the inhabitants, nor the natural wonders; neither the mountains, nor the streams, nor the forests, nor the plains, nor the cities, nor the fields. Cold and unimpassioned, he calculated the mere number of leagues which he had travelled; set up a Cross and an inscription to notify the future adventurer that Coronado had been there before him, and then, turning about, carried back to Mexico a chilling account of the North, and with one fell swoop, dashed all the golden prospects which had been excited in regard to it.

The report of Coronado dissipated entirely the hitherto imagined glories of the north and northwest; so much so, that for many years afterwards little was said or thought of the Seven Cities, or of Marata, Acus and Totontec, or of Quivira. Nobody visited them; nobody cared for them; ages passed away; the dust of centuries gathered around the old records, and they were forgotten. It is true that, in the course of time, the Spaniards spread further and further northward, settled in the countries which reach from the Mississippi to the Bay of San Francisco, and established their *pueblos* in the same valleys which Cabeza de Vaca, Marcos de Niza, and Vasquez de Coronado had traversed; but they were not the Spaniards of the olden time. It is true that the Spanish name advanced over all these regions; but it was not until after the magnificent empire of Charles I and Philip II had fallen into the hands of their feeble and puerile successors, and the ancient enterprise of Spain and the Spanish people had become a thing of the past. It is true that in name the Spanish sway was extended over these vast territories; but in reality the sovereignty

remained rather in the roving bands of Apaches and Comanches than passed to the descendants of the conquerors.

Since the times of the old chroniclers, in whose works lie scattered the details which we have thus far attempted to collect and connect together, little, if any, new information in regard to Cibola, and her famous Seven Cities, has been acquired. Historiographers have done nothing more than repeat the old story; and travellers, until very recently, have not considered it worth while to search into the question, what basis of truth existed for this strange episode in Spanish-American history. For three hundred years readers have commiserated the melancholy fate of Estevanico, and been amused at the credulous recitals of Marcos de Niza. The wrath of the Cibolan governor, when tendered the present of bells and feathers, has interested those who could appreciate the ludicrous and humorous; and his asseveration, that he knew the people from whom they came, can not have failed to attract the attention of those who had a taste for speculation and wonder. But here the interest on the subject seemed to stop. Full faith and credit was attributed to the report of Coronado; and when he declared there was "nothing in it," the question was supposed to be settled and at rest.

Marcos de Niza may have been something of a visionary. His stories about the sea, which he saw in the middle of the continent, and his acceptance of the unicorn fable, and the ready credence he gave to marvels he did not see, and the improbable splendours which he supposed he beheld from distant prospects in the mountains—all go to shake the dependence which might otherwise be due to his testimony. But if he was something of a Munchausen, Vasquez de Coronado was much more of a Sir Charles Coldstream. Marcos de Niza, doubtless, imagined more than he saw; but Vasquez de Coronado did not see what really existed. There are no evidences, now ascertainable, to fully sustain the marvelous accounts of Marcos, but there are many proofs within easy reach to overthrow the skeptical and incredulous narrative of Coronado. For, notwithstanding all the exaggerations and marvels with which the name of Cibola has been connected, and notwithstanding it has for ages been regarded as a mere figment of romance, it is now well ascertained, it is indeed a fact incapable of dispute or contradiction, that a great people, considerably advanced in civilization, inhabited the countries of which these old Spanish adventurers have made their various reports.

It is particularly within the last few years—since these countries have become a part of the United States, and since they have been

found to lie in the track of one at least of the great trans-continental railroads—that they have attracted public attention. Scientific men have visited and explored them, traversed, measured, and studied them. And among their discoveries the famous old Seven Cities, or what is supposed with much reason to have been the Seven Cities, and many others, which may have well have flourished in the age of Marcos de Niza and Vasquez de Coronado, have come to light. The ruins found half buried in the valleys of the rivers Chaco, Zuñi, and the tributaries of the Rio Grande, give evidence of an old population far advanced beyond the Indian of the present day. There, almost entirely covered with the rubbish and *débris* of centuries, are to be seen the remains of magnificent structures, the masonry and architecture of which indicate an unexpected combination of science and skill. Some of the buildings consisted of more than a hundred separate apartments on the ground floor alone, and some show that they were three or more stories in height. The walls were painted and pictured, and the remnants of coloured pottery scattered about, indicate a degree of polish and refinement of which savages could not be susceptible. By whom these houses were erected, and these pictures and decorations designed, we can only conjecture. Whether they were reared by the same inhabitants whom Cabeza de Vaca, Marcos de Niza, and Vasquez de Coronado first made known to Europeans, or whether they were the work of earlier inhabitants, of the Aztecs, or the still earlier Toltecs, is mere matter of speculation. Whoever the people may have been, and whenever the structures may have been built, it is certain that the traveller in those regions finds much to wonder over in the strange masonry and fallen terraces which he meets.

He can reconstruct in imagination, from what still remains, the habitations of a race which must once have had a regular policy and a government of law.¹

¹ Theodore H. Hittell, in "The Californian," 1880.

CHAPTER VI.

ABORIGINAL MEXICO.

Various media of exchange used by the Mexicans—The official system consisted of cacao-butl and copper xiqui—Table of equivalents—Analogy of xiqui, sequin and zecchin—Probable common origin—Value of the cacao-butl maintained by monopoly and limitation of their issues—Prerogative of money—Method of notation—Antiquity of the score—Mexican incarnation date probably Buddhic—Wonderful stability in the value of cacao-butl throughout three centuries of time—Demonetization of the xiqui by the Spaniards—Introduction of Spanish copper quartos and octavos—The natives toss these coins into the Lake—Spanish attempt to demonetize cacao-butl—Its failure—Return to the use of cacao-butl in 1536.

MANY innocent people, whose sole conception of money is that of a coin, that is to say a piece of gold, silver or copper, stamped with figures or letters, have denied that the aboriginal Mexicans were acquainted with the use of money. This view is wholly erroneous. The Mexicans not only used money, they had several kinds of it. They used copper "chisel" money and cacao beans, the latter being called cacabutl or cacao money, also patlachté, or patasté, from patla, exchange. In provinces remote from commercial centres they also used for money cotton stuffs, called patolcuachtli, measuring it, as the Norsemen of the same period did their vadmal, by the ell. They used linen-cloth in the same way. Small packets of feathers were also used as a medium of exchange in remote places, and probably also clay coins for small change. ¹ Humboldt also mentions gold dust in transparent quills; but this was probably only after the Conquest. Previous to that event and for some reason unknown to us, possibly the Buddhic interdict upon the use of gold money, ² gold was not used for money; and possibly for this very reason it was inferior in value to copper. It certainly was not for lack of skill in beating gold into plates, or fashioning the plates into coins, for the native gold jewellery proves that these arts were well known;

¹ The Smithsonian Report for 1876, p. 399, mentions clay-stamps for printing cotton-cloths. These could scarcely have failed to suggest baked clay coins, such as were used in China, Chaldea and Egypt.

² See Del Mar's *His. Prec. Met.* ch. xxiv.

indeed, very shortly after the Conquest, the gold ducats and castellanos of the Conquerors were counterfeited by the natives. ³

Setting aside the commodities used in remote districts in the place of money, the usual currency of the Mexican empire consisted of chisel-shaped flat copper (sometimes tin) pieces and cacao beans, upon the following scale of equivalents:

Mexican Money before the Conquest.

20 cacao beans,	-	-	-	1 olotl.
20 olotl,	-	-	-	1 zontle.
20 zontle,	-	-	-	1 xiquipili.
3 xiquipili,	-	-	-	1 carga.

Carga is a Spanish word, meaning a load. The native word for the carga of 24,000 cacao beans has not been preserved. The name and value of the copper piece are also lost. In all probability it was called the xiquipili and was valued at 8,000 beans. As the carga of beans was afterwards valued by the Spaniards at 15 pesos (200 beans to the real de plata) it follows that the xiquipili was worth 5 pesos. Therefore, in a certain sense, this piece among the aboriginal Mexicans, represented, among other native moneys, what the "sovereign" now does in England, and the half eagle in the United States. This valuation must not be taken to relate to its purchasing power over commodities.

There is curious resemblance between the xiquipili and the sequin of Venice. Sequin is a corruption of zecchin, from zeccha, the Arabian name for mint-house, a term derived from zekkeh or sikka, a die or stamp. "The privilege of sikkeh, *i. e.* of coinage, was among the first things Mahometan kings thought about, on ascending the throne."⁴ Zikka, again, is from sicca, an Oriental term, which the Arabians brought into Europe from India, where it still exists in the name of the sicca rupee. Teleologically, sicca means a cutting instrument, alluding to the tool employed for cutting and rounding or otherwise shaping the coin. From this word we have chisel, scissors and several other English terms, used for cutting instruments. Xiqui seems to have been also the Mexican word for chisel. It appears not only in the name of the chisel-shaped copper and tin "coins" of Mexico, called xiquipili, it also appears in the name of the mint-house

³ The viceroy Mendoza, in a letter to the king, dated Mexico, Dec. 10, 1537, says that the native goldsmiths had recently counterfeited the Spanish testoons minted at Axiqipilco. The cacao-butl were also cleverly imitated in clay.

⁴ Poole's "Essay on Coins", p. 162.

called Axiquipilco, where in 1535 the Spaniards established a mint for coining. Like sequin, which meant both a coin (the gold ducat) and a mint-house, xiqui appears to have had the same double meaning. It is quite probable that both words emanated from the same source—India. It might be added that there is no warrant for spelling the Mexican term as xiqui, except that it comes to us through the obsolete Spanish orthography of the sixteenth century. The same sounds would now be conveyed by means of ziki, or siki.

The xiqui (or xiquipili) was current not only in Mexico but also in Yucatan, where the inferior money consisted of bell-shaped copper pieces, something like the bell-shaped pieces of China; also of cacao-beans and shells, the latter suggesting the cowries of India. The shape of the xiqui was like that of the blade of the domestic meat chopping-knife of the present day. The xiqui measured about $4\frac{1}{2}$ inches from tip to tip, and $4\frac{1}{2}$ inches from the extremes of blade and shaft, and was about one-twelfth of an inch thick. The edges were raised by being beaten back.⁵ It was this peculiar shape that constituted its "mark of authority". Similar shaped "coins" were minted by the Chinese of a remote age, some of which are in the possession of the writer. Specimens of the Mexican xiqui, also of the Chinese coins of the same shape are in the collection of Paris, where the writer has studied them. The earliest allusion to the xiqui is in a letter of Cortes to the king, dated October 15, 1524, in which he says that tin money circulated in Taxco and other provinces of the empire. The earliest mention of the cacao-butl of New Spain is by Columbus, in his journal or log-book of 1502. Mr. Brevoort adds that in Guatemala they were called zicarfa and zapote; the former term being another reminiscence of zikka or sicca. Butl, meaning money, has also a resemblance to the Scotch word bootle, and Danish buidel having the same meaning. Its modern anagram is boodle.

Returning from this verbal digression to the Mexican system of money, the value of the cacao-bean was maintained by limitation. The growing of cacao trees was a prerogative of the crown, and where the imperial authority was weak, it became a prerogative of the feudal lords. Reasoning by analogy, the control of the copper mines must have been similarly monopolized in order to maintain the value of the xiqui. By this it is not intended to assert that these mines were worked as the Spaniards afterwards worked them, namely, by

⁵ A full sized engraving of the xiqui appeared in the American Journal of Numismatics, Vol. V, No. 2. One of these "coins" was exhibited at a meeting of the Boston Num. Soc. in May, 1860.

deep excavations. The Mexicans had no iron or steel tools. Their excavations were, therefore, very superficial; and only such mines were worked at all as contained native copper close to the surface.

Although no mention of the fact occurs in the works consulted by the author, it is believed that the monopoly of growing the trees of the cacao beans used for money, which was exercised by the native government before the Spanish Conquest, was continued by the Spaniards after that event; otherwise, it is difficult to understand how the value of the beans was maintained, as it certainly was maintained. There is nothing surprising in the absence of such a record; for the Spanish writers as a rule took but little heed of anything relating to the natives, beyond the precious metals, the *encomienda* system and the *mita*, both of which were agencies for the production of gold and silver and for the control of native labour.

Concerning a people of whom so little is known as the aboriginal Mexicans, the slightest clue may be of importance. It will be observed that in their monetary system the multiplier is always, except in the last instance, twenty. Multiplying by the score is an Indian custom of very high antiquity, antedating the period of the second Buddha, whose followers altered the common system of notation by using the dozen for a multiplier, in place of the score. Traces of both of these notations were preserved in the Roman system of *ℒ. s. d.*⁶ From these considerations the establishment of the Mexican system of money may reasonably be dated far backward into antiquity, though not so far backward as their area of Votan or Woden, B. C. 955, which is a Buddhist date of the Incarnation still employed in Tartary, Tibet and China⁷. It may reasonably be conjectured that this date was brought to Mexico by the Buddhist missionaries of A. D. 488, the account of whose voyage is given by Mr. Vining⁸, and employed, as most of the incarnation æras were employed, retrospectively.⁹

The cacao beans, so commonly employed for money both in Mexico, Yucatan and other American states, were the product not of the common, but of a peculiar cacao-tree, whose pods contained from 20 to 40 beans each. The term *olotl* may, therefore, have also been employed for pod. The equivalents employed by the Spaniards were 10 *olotl* to the real or 80 *olotl* or 1,600 cacao-butl to the peso. In

⁶ *Hist. Mon. Sys.*, ed. 1895, chap. VII.

⁷ "The Worship of Augustus," chap. VII.

⁸ Vining's "Inglorious Columbus."

⁹ Such was the case with all of the Indian, Chaldean, Egyptian, Greek and Roman ideal incarnation æras. Cf. "The Worship of Augustus."

Humboldt's time, the early part of the present century, cacao-butl were still employed by the natives in suburban districts for small change, the equivalents being 72 to the medio, or 1,152 to the peso. The rise in the value of cacao-butl, compared with Spanish silver coin, was therefore less than 39 per cent. in the course of three centuries; a record for stability which neither gold nor silver coins, compared with commodities, can show in any age or country known to the writer. That the cacao-butl should have risen in value as between a period, that of Cortes, when the precious metals were freely acquired by plunder and that of Humboldt, when they were expensively obtained by means of capital and labor employed in mining, is an evidence of their merit as an equitable measure of value.

After the Conquerors had exhausted the resources of plunder and cruelty they found it necessary to trade with the natives and even among themselves. For this purpose there was no other than the native money. In order to avoid the use of what to them was an unaccustomed and uncouth currency, the Spaniards, according to Mr. J. C. Brevoort, struck or cast a number of round copper coins, quartos and octavos, in the name of the King of Spain, the designs and legends upon which are given in the American Numismatic Journal for October, 1881. They probably at the same time demonetized or decried the native xiqui, for the reason that with their resources for mining copper, that metal must have so enormously declined in value as to render the xiqui comparatively valueless as multipliers for the cacao-butl. Whether in resentment for such demonetization, or for some other reason which the Spanish historians have failed to mention, the natives, though obliged to accept, declined to pass, this money; and contemptuously tossed it into the Lake of Mexico. According to Herrera this was in 1522; while Torquemada less explicitly assigns it to some time previous to 1535.

In 1527 the Spaniards, in order to force the currency of their copper coins, forbade the cacao-butl to be passed by count and ordered it to be sold by the heaped measure; an attempt to degrade it from the function of money to the condition of a commodity. This attempt resulted in so much difficulty, friction and evasion, that in 1536 the edict was repealed and the cacao-butl resumed its ancient sway as a convenient and acceptable measure of value among the natives; precisely as cowrie shells still maintain their ancient sway as money in some portions of India.¹⁰

¹⁰ The number of cacao-butl to the peso de plata and that of Chinese "cash" to the same coin was not unlike; that is to say about 1,600 to 1.

CHAPTER VII.

ABORIGINAL PERU.

A stable system of money essential to the organization of states—Peru had evidently repeatedly tried metallic systems and failed—Superabundant but fitful supply of the precious metals—Attempt to regulate this by monopolizing the mines—Failure of this measure—Final abandonment of metallic money—Adoption of barter with “Country Pay” for money and capsicum pods for small change.

A NATION consists of land and a people organized for defence, attack, social intercourse and the administration of justice. The things most essential in effecting such organization are military advantages and a stable monetary system. Thus, in the great reorganization of France which followed the Revolution of 1789, the ancient arms and tactics were abandoned in favour of the artillery and improved military methods advocated by Napoleon; in the reorganization of Japan, after the Revolution of 1867, the feudal bow and arrow, and the control of the daimios over the issues of money, were superseded by European arms and a national mint; and in the reorganization of Afghanistan, in 1880, the Ameer, (Abdul Rahman,) began by establishing simultaneously a manufactory of cannons, rifles and ammunition, and a national mint, both located at Caubul and both under European superintendence. Should the European powers, instead of partitioning China, permit her to reorganize her government, it is safe to predict that her first efforts will be directed towards establishing an army and other national military advantages founded upon the character and resources of the land and people; and a monetary system based upon the national power and credit, supported by such improved military system.

In his somewhat romantic but popular “History of Peru,” Prescott repeatedly lays down the sweeping assertion that the Peruvians “had no knowledge of money;” but this is a very superficial view of the matter. The Peruvians not only had a knowledge of money, they had evidently had a very unhappy experience of the subject, especially with money of the precious metals. As explained in another work, gold and silver, far from being the best, are among the worst

materials out of which to fabricate the symbols of money¹; because they are the least destructible of all substances; and unless the conditions under which they are employed are favourable to their rapid and continuous consumption in the arts, they would soon become superabundant and rapidly decline in value. In Peru they had got to make water pipes and tanks of gold; and household utensils, and even planking of silver. The arts could consume no more.

Owing to her isolation (for according to Prescott, Peru was unaware of the existence of, and was certainly not in communication with Mexico, or indeed with any other organized state,) another and more striking danger attended the use of gold or silver for money-symbols. There being no international stock on hand of these metals to act as a buffer against the effects of new supplies, it followed that the discovery and working of every new placer or quartz vein threatened to entirely revolutionize prices and disintegrate the social order. The monopoly of the mines of copper, gold and silver, by the sovereign-pontiff of Peru, a fact which Prescott himself admits², almost amounts to a conclusive proof that coins of these metals had been tried in Peru and abandoned as an impracticable measure of value. Precisely the same thing had happened in ancient times in India, in the Greek states of Sparta, Byzantium, Clazomenæ, etc., in Carthage and even in Rome. All these states had tried gold or silver and sometimes both of these metals for coins and had eventually given them up and resorted to numerary moneys as a refuge from fluctuating prices and unstable social conditions. But several of these states, when they abandoned gold and silver moneys, neglected to alter those laws relating to gold and silver mining which the original use of such moneys had rendered necessary.³ Hence, even after they resorted to numerary moneys, the old mining laws remained. Such also was apparently the case in Peru. At the period of the Spanish Conquest, the gold and silver moneys had disappeared and given place to farm-produce, with peppers in pods for small change, something like the "country pay" of the British-American Colonies, mentioned further

¹ Del Mar's "Hist. Money in Ancient States," Ch. I.

² The Mines of Peru, both of copper, silver and gold, were made by law the exclusive property and prerogative of the Inca. Prescott, "Conquest of Peru," ed. 1874, I, 32, 56.

³ Rome was not one of these neglectful states. When she abandoned gold and silver coins for a numerary system, about B. C. 385, she very wisely closed her gold and silver mines. Pliny, N. H., III, 24; XXXIII, 21. China did the same thing. "Hist. Precious Metals," p. 346.

on in the present work.⁴ But the old mining laws remained; and the Inca, for no other imaginable reason than neglect to alter them, retained that exclusive control over the product of the precious metals which had evidently belonged to a period when it was necessary in the public interest to attempt to regulate their production.

Something of the same sort may be witnessed to-day in the United States of America. There, the mining laws are those of ancient Rome and medieval Spain; while the monetary laws are those of the British Mercantile æra. The mining laws were designed to stimulate the production of gold and silver, in order to provide an ample supply of those materials for coinage. There are no royalties, no licenses, nor no taxes on mines, in the United States; a mine belongs to anybody who can find one; and he even has the right to pursue his vein under the surface of another man's land. The monetary laws, copied from the British Act of 18, Charles II., c. 5, entirely defeat the object of these provisions; for they oblige gold and silver to be coined by the government and endowed with its credit (the function of legal tender) free of charge. As there is no interdict or tax upon exportation, they enable the beneficiaries under this act to melt such metal down or else ship it away to foreign countries, without loss or hindrance.⁵ These privileges, which were formerly granted to both metals and are still idiotically attached to gold, entirely defeat the mining laws, whose object it was to afford the country an ample metallic supply. The monetary system of the United States is suffering from the escape of the precious metals to foreign countries and their absence or fitful presence in the home circulation. That of native Peru suffered from a superabundance of these metals. Yet the empire was so weak and disunited that with all its affluence of gold and silver, Atahualpa found it difficult to collect his Ransom⁶ within the time prescribed by his captors. That the government of the Incas was in a moribund state, its arts, institutes, religion and feudal condition indicate as plainly as possible. Already had the hierarchy split in twain. Had

⁴ As with individuals, the childhood and old age of states often present similar characteristics or surroundings. There is a period, common to both individuals and societies, when the lines of growth and decay cross each other. "Science of Money," Ch. II.

⁵ These absurd laws make it criminal to melt coins within the country, while they facilitate and promote their melting abroad.

⁶ The Ransom was erroneously computed in my "History of the Precious Metals," ed. 1880, p. 110, at £3,500,000. It really amounted to about £900,000, or \$4,500,000. The principal obstacle to its collection within the time prescribed by Pizarro was the reluctance of the native priesthood to part with the treasures of the temples. Prescott.

the Spaniards delayed their arrival for another century, the government would have inevitably gone to pieces; when the natives would have probably degenerated into savages. It was not without a reason that the richest fields of Spanish plunder in Peru were the graves, the temples and the houses of the princes and nobles. Sarmiento says that 100,000 castellanos (each of about the weight of a half sovereign) of gold were sometimes got from a single tomb (graveyard). Las Casas says that within 20 years of the Conquest more than half a million ducats (about a-fifth less in weight than castellanos) were taken from the graves of Truxillo. Humboldt says that in 1576 a Spaniard got from the sepulchre of a Peruvian prince near the same place a mass of gold worth a million of dollars. The temple at Cuzco was literally a mine of gold. The vases, domestic vessels, pipes and even the reservoirs for water, were made of gold or silver. The statues of gods and animals, even the flowers of the temple-altars, were made of these metals. On the march to Cuzco the Spaniards captured ten slabs of solid silver each 20 feet long, one foot wide and two or three inches thick, which were intended to decorate the dwelling of an Inca noble. This mass was sufficient to coin nearly half a million dollars. All these facts are narrated by Prescott himself, who nevertheless wholly fails to detect their significance. The European economists unanimously decide that gold and silver are the substances best fitted by nature for the purposes of money, some of them even impiously call them the money of Providence, God's money, Nature's money, etc. Yet Prescott avers that the people who had more of God's money than ever any other people had, "knew nothing of money."† It might be added that they knew little more of God.

On the contrary, the discerning mind can scarcely fail to perceive that the Peruvians had long used these metals for money, but had been constrained to abandon them on account of their singular unsuitableness for that purpose. They had doubtless learnt, from repeated experiments and failures lasting through many ages, that the value of money and its usefulness as a measure of value, depend not upon the material of which the pieces are made, but upon the number of such pieces; and they therefore, though reluctantly, had abandoned such material to the baser purposes of decorative art and household implements.

The fact that copper was more valuable than gold (Helps, III, 478,) was due to the fact that gold was to be obtained and doubtless was

† Prescott, I, 157, 170.

obtained for the most part from placers; while copper had to be got from subterranean mines. Without iron or steel tools such mines could only be worked superficially, and probably none at all were worked except such as contained native metal near the surface. The same may be said of silver; and though we have no record of the fact, this metal in aboriginal Peru was probably more valuable than gold.*

A numismatic work of recognized authority explicitly states that in Peru before the Spanish Conquest, the pod of the uchu or capsicum was in common use as money.* This statement is fully borne out by reference to the Spanish historians; yet in none of them does there appear any succinct account of this money, nor of its value in other commodities, nor its equivalents in the Spanish metallic money which succeeded it. The social system of Peru was already so near dissolution that, like the Roman empire during the Middle Ages, but little money of any kind was necessary. The lands of Peru belonged to the Inca and were held of him by his nobles. The cultivators were merely feudal tenants, who paid their taxes with one-third of their produce, which went to the Inca, and their rents with another third, which went to the Inca lords; the remaining third forming the sole personal reward for their exertions. The state was dying; and like all moribund subjects, it had gradually divested itself of even the means to live. The dissolution of Peru probably originated in the loss of such military advantages as had previously enabled it to resist foreign attack and suppress domestic sedition, but this loss was undoubtedly accompanied by, if indeed it did not originate in, the decay of its monetary system; an event which no state can long survive.

* The Incas are said to have at least superficially worked the silver mines of Porcos before the Conquest. Their excavations consisted of small holes driven into the sides of the hills. Prescott.

* "London Numismatic Journal," 1836-7, p. 158. A similar money was afterwards used by the far less civilized tribes on the Amazon. This consisted of cakes of wax weighing about a pound each. Smyth, "Journey from Lima to Para," 1836.

CHAPTER VIII.

THE SPANISH COLONIES.

Native population of Spanish-America—Destruction of life by the Conquerors—Total value of the spoil—Each life destroyed yielded about half a guinea—Indifference of posterity to this appalling sacrifice—Monetary system of the conquerors—Gold-dust and bars—Spanish coins—Demands for Colonial mints—The king raises the value of his gold coins—American mints authorized to coin silver only—Free coinage for taxed silver—Gold coinage authorized—The king doubles the value of all billon and copper coins—American mints closed—Tremendous outcry—Remarkable concessions of the Crown—Free coinage for taxed gold and silver, authorized in 1698—Worldwide and mischievous influence of this measure.

It was the opinion of Sir Arthur Helps, who had access both to the published histories of America, and the Archives of Simancas, that at the period of the Conquest, that portion of America which fell to the Spaniards and Portuguese, contained upwards of thirty millions of inhabitants. The following table must be regarded only as a very rough approximation toward the details of this estimate.

Population of Mexico and Central and South America, at the period of the Conquest. Authorities; Las Casas; Alcedo; Herrera; Humboldt; Helps; Macgreggor III, 1153; Appleton's Encyc. First ed., art. "Inca."

Countries.	Population.
Hispaniola (Haiti and San Domingo) Las Casas says 3 or 4 millions; let us say half	1,500,000
Cuba; same	1,500,000
Puerto Rico	500,000
Mexico (Las Casas says 15 millions; Raynal II, 294, says 5 millions); let us say	10,000,000
Nicaragua; say	250,000
Guatemala; say	500,000
Honduras; say	300,000
Darien, Helps I, 391	200,000
Peru (including Columbia, Bolivia, Equador and Chili) Helps III, 537, says 10 or 11 millions, without mentioning Chili: therefore let us say	11,000,000
La Plata; say	1,000,000
Pearl Coast (Venezuela and Guiana)	250,000
Brazil; say	5,000,000
Total (which substantially agrees with Helps)	32,000,000

In 1535, Father Las Casas, bishop of Chiapa, declared to Philip II. that in less than 40 years the Spaniards had destroyed 15 millions of these people. Sir Arthur Helps who went over the subject very carefully less than half a century ago, came to the conclusion that the destruction of native life varied between 12 and 15 millions of people. It has been a matter of common observation that the number of negro slaves who were afterwards imported from Africa to fill this void, fell far short of the number of natives sacrificed by the Spaniards and Portuguese, yet the imported negroes amount to several millions. It is regarded as safe to assume that the population of Mexico and Central and South America at the period of the Discovery amounted to 30 millions, that it was reduced to 15 millions, and that it did not regain the 30 million line until about the year 1860, since which time, however, it has doubled.

Mr. Danson after very elaborate studies arrived at the conclusion that the total amount of spoil obtained by the Spaniards, before resort was had to mining, amounted in value to about £8,000,000. It follows that each human life destroyed yielded on the average about 10s. 8d, say half a guinea. How any human being possessed of the smallest degree of compassion—I say nothing of the clergy who since the day of bishop Las Casas and until that of bishop Walsh have persevered in an attitude of stolid indifference to this subject—can contemplate this terribly cruel and needless sacrifice of life without resolving that so far as his own efforts go, it shall never occur again, passes the writer's comprehension. Yet, the same thing is going on to-day in South Africa and apparently so far as the clergy is concerned it will go on forever. The hunt for gold began with the sacrifice of the copper-colored and black races; it will be followed by that of the yellow races; it may not end until it has exterminated many of the white races. The passion for greed, extenuated by the logic of a false premiss, appears to be stronger than either the commandments of Moses or the gospels of the evangelists.

The Spanish Colonists, (and this term may be here taken to include the Portuguese of Brazil) after they had plundered the natives, torn their temples and dwellings to pieces, and ransacked their graves in the search for treasure, found it necessary to create some sort of money in order to deal equitably with one another; on the principle that even among thieves there must be some sort of honesty. For this purpose they began by using such weights of gold and silver as agreed with those of the coins then employed in Spain. The silver, after paying the King's Fifth, was cast in bars, hammered into plate

and punched into discs which were afterwards halved and quartered to the size or weight of tostones (4 reals) and pesetas; (2 reals;) some of them, or imitations of them, remaining in circulation down to a comparatively recent day. The gold was sealed up in little bags, or else cast into small bars. After the King's Fifth was deducted, these bars were stamped with the royal device, the date of their fabrication, their weight, fineness and value in Spanish gold coin.

Besides the quinto on the production, the crown levied a seigniorage, "derechos," on the coinage. To evade as much as possible the payment of these exactions, the colonists, though at some inconvenience to themselves, employed gold bars as money, whenever the magnitude or peculiarity of their transactions permitted. Unwilling to lose its "derechos," the Crown in 1589 forbade the use of gold-dust or gold or silver bullion as money in any case; but, of course, such an interdict was difficult to enforce. As a matter of fact, most of the bullion at this period went to the mints and submitted to the derechos. But this was not enough for the Crown, which, to extort an additional profit, had recourse to a new expedient. This was to raise the value of its silver, billon, and copper coins.

Gold-dust in bags, or bars, or lumps of bullion, make a very inconvenient kind of money. Its value could only be determined and definitely expressed with reference to coins. If such money had been regarded merely as pieces of merchandise, a separate bargain would have had to be made in respect of each piece; and in the conclusion arrived at, very great allowances would have had to be made for such changes of value as each piece may prove to have undergone, unknown to the buyer, since the last bargain of like nature took place. But nothing of this sort occurred. It was well known how many coined "castellanos" each bar of gold contained and as well known how much each castellano would buy, either in Mexico or Seville. The inconvenience of using the bars arose from their great and uneven weights. It was seldom that a bar or slug weighed less than several ounces; and, as it was necessary to keep each adventurer's lot of gold or silver distinct from the other lots deposited at the smelting-houses, (the same practice is pursued in all refineries and mints to this day), it followed that the bars were of uneven weights and therefore worth uneven sums of money. For example the smallest gold bar had stamped upon it a certificate of somewhat the following character: "This bar weighs 7 ounces, 7 octavos and 11 grains; fineness, 10 dineros, 19 grains." Such a piece as this, of uneven weight and requiring an intricate calculation to determine its

precise value in coined money, could not itself have been used as money except in rare instances; and the adventurers must have been willing to submit to any reasonable exaction on the part of the Crown rather than sell their bars, as otherwise they would have had to do, to privateers, smugglers, or other shady intermediaries.

Even after such submission, their difficulties were only half removed. By submitting to a tax of 20 per cent on production, plus the *derechos* and mint charges, they could exchange bullion for coins containing an equal weight of fine metal; but these coins, *tostones* and *pesetas*, were too large for all the transactions of traffic. What they needed was minor coins, with which to "make change." The Crown being fully aware of this, took advantage of it in 1603, by requiring the public to pay more metal than before for a given sum of such minor coins; in short, twice as much. Then it melted down this metal and fabricated more minor coins out of it, until at length the entire circulation of Spain came to consist of billon and copper pieces. The Spaniards put up with this, because there was no help for it short of revolution, a remedy to which at that period nobody dreamed of resorting; for the Castilian revolution of 1520 and its bloody repression by the Crown were fresh in the public mind. But with the American colonists it was different. The military arm of Spain was far away; there was an extensive back country in which to take refuge; the coasts were infested with privateers from Holland, England and other countries, all eager for gold and silver spoil and traffic; and so the surreptitious sale and export of bullion went on unceasingly. Unless the Crown lowered its *quinto* to a *decimo* and relinquished its *derechos* by yielding to the clamor for "free" coinage, there was danger of its losing all the profits, both of production and seigniorage.

Such was the modern origin of free coinage. It arose in Spain, as it afterwards did in England, from the unjust exactions, amounting almost to confiscation, on the part of the Crown, which forgot that it represented a State and only remembered its own personal advantage. It demanded from the community too much and in consequence it lost all; it lost to the State the control and regulation of money. This has already cost the peoples of Europe and America three centuries of suffering; it may yet cost them many bitter conflicts before it is recovered and lodged again in the only hands capable of administering it equitably—the hands of the State.

Notwithstanding the gross impositions above alluded to and the complaints they occasioned, the Crown refused to relax the laws

which forbade the exportation from Spain of coin or bullion. By the year 1510 the Spanish-American colonists had become sufficiently numerous to make their complaints heard in the mother country; and for the first time in the history of America a few coins were permitted to be exported thither from Spain. Herrera says that the first Spanish coins found their way this year to San Domingo, chiefly silver reals. Counterfeit castellanos and ducados had also made their appearance in the circulation; indeed they seem to have been the earliest coins employed in the New World. In 1521 gold and silver coins were sent from Spain to Panama and in 1523 to Mexico. In 1524 the king arbitrarily raised the value of his gold coins from 10 to 11 $\frac{3}{8}$ times that of silver coins of the same weight and fineness. In the following year quicksilver was sent to San Domingo; and Ponce de Leon, with a set of coinage dies, to Mexico; but owing to the difficulties which sprang up between this commander and Cortes, no use appears to have been made of them; perhaps they were lost or destroyed. In 1528 a petition from the colonists in Hispaniola complained that the gold coins sent from Spain were only 19 carats (0.791) fine and sometimes even baser; and they asked that the peso de oro (or castellano) be stamped at 450 maravedis (instead of, as we suppose, 490); also that 200 cuentos in silver reals and silver quartos be sent out from Spain. To the former complaint it is probable that no reply was vouchsafed; for, as we shall presently see, the King was meditating a still further enhancement in the (silver coin) value of his gold coins. To the latter, it is likely that the Crown complied by shipping out a lot of silver and billon coins; still, in 1531 and again in 1535, complaints were made of a scarcity of small currency.

It was in this last named year that the first mints were established in America, although no coins were struck by them earlier than 1536.¹ These mints were in the cities of Mexico, (attached to which was the native auxilliary mint at Axixipilco,) Santa Fé and San Luis Potosí; all in Mexico and New Spain, which was then under the viceroy Mendoza. A mint to coin billon pieces for the King was also established at San Domingo, in the island of Hispaniola. Besides the Quinto, or fifth on production, or capture, there were levied three reals on every mark weight of silver, namely, two reals to cover the cost of coinage and one real for the King's seigniorage. A derecho of one and one-half per cent ad valorem, provided for in the law of

¹ Mr. Brevoort contends that certain rude and undated copper coins of Juana and Charles were struck by Cortes; but the argument is not convincing.

1519, appears also to have been retained. All bullion presented for coinage must exhibit proofs of its having paid the Quinto, or else it is liable to confiscation. The exportation of coins, except to Spain, is forbidden. At this period all coins were made by hand, the coinage-press not yet having been invented. The issues from the mints no sooner began than counterfeits of them made their appearance in the circulation, although the penalty for this offence was death. Even the native Mexicans imitated the Spanish-American testoons. As yet no gold coins were permitted to be struck in America; only silver and billon pieces. The mints began with tostons and pesetas; in 1537 they were permitted to add pesos de á ocho (dollars) and reals (eighths) all of the same weight and fineness as in Spain, "como en estos reynos." After the King had raised the value of his gold coins, in maravedis, leaving the silver coins at their old valuation (34 maravedis to the real) the colonists declined to bring silver to the mints at this rate and in 1538 there were said to have been 50,000 ducats worth of base reals circulating in Hispaniola. In 1540 a lot of uncoined silver helped to eke out the security of small coins; and in the same year the Crown was petitioned to stamp silver bullion for individuals at the rate of 44 maravedis to the real; but it refused. The city of Concepcion also petitioned for a mint to coin gold and silver, but without avail.

This will be a convenient place in which to set forth the monetary system of Spain. The usual equivalents were 2 blancas equal to 1 maravedi; $4\frac{1}{4}$ maravedis equal 1 ochavo; $8\frac{1}{2}$ maravedis equal 1 quarto; 17 maravedis equal 1 medio; 34 maravedis equal 1 real; 8 reals equal one peso; 14 to 20 reals equal 1 castellano; 10 to 15 reals equal 1 ducat; the equivalents varying, for the most part, with the changes made by the Crown from time to time in the ratio of gold to silver. The cuento, whose origin was the Roman centenary³, always consisted of 100 castellanos, or else their equivalent value in other coins. The peso, or dollar, is from *thaler*, the origin of which was the *talent*. The silver thaler of the Renaissance contained $565\frac{1}{2}$ grains fine metal. This gradually fell to about $457\frac{1}{2}$ grains. The German Constitution thalers began with 452 and ended with 390 grains fine. The Spanish *piezas de á ocho*, or pesos, or dollars, began in the year 1504 with 413.2 and ended in 1792 with $371\frac{1}{4}$ grains fine. At this period and at this weight they were adopted by the United States government and they so remain at the present day.

³ Gibbon.

Spanish Monetary System during the reigns of Ferdinand and Isabella, Juana and Charles I., and Philip II., according to Covarruvias, Ulloa, Heiss, Irving, Prescott, Helps, Brevoort and the coins weighed by the writer. The coinage laws were altered so frequently during this period that to give a full and precise account of their operation would fill a large volume. These alterations include the raising of gold from 10.985 to 11.555 and 11.675, its lowering to 10.755 (Edict of Medina, 1497) and its subsequent raising to 13.333 and 14.45 times the value of silver. The gold ducat was repeatedly lowered in contents and in 1603 the billon coins were doubled in value.

Gold Coins.		Troy gr. fine.	U. S. Coin Value.	
Pistole or double ducat (Sir Isaac Newton)		104.000	\$5.00	
Castellano, or peso de oro. Prescott says \$3.07; Ramirez (De Bow, II, 94) says \$2.93		72.116	3.00	
Peso ensayado (Prescott says this was one-fifth more than the ducat. Perhaps it was the old and heavier ducat compared with the newer and lighter one)		—	—	
Ducat, or escudo, Ferd. and Isab.		56.400	2.43	
Ducat, Juana		54.000	2.40	
Ducat of Netherlands, etc., Charles		37.000	1.60	
Ducat " "		36.250	1.60	
Ducat " "		29.000	1.25	
Ducat Philip II.		33.125	1.42	
Silver Coins.		Troy gr. fine.	Silver Coins.	Troy gr. fine.
Peso de á ocho, Ferd. and Isab.	413.200	Real de plata, Ferd. and Isab.		51.650
Peso " Juana-Charles	400.000	Real " Juana-Charles		50.000
Peso " Philip	388.000	Real " Philip		48.500

It was precisely during the period of the above mentioned scarcity of coin in Hispaniola, year 1540, that De Soto was prospecting for gold in the Naucootchie valley of Georgia, Cortes reduced to beggary, was being insulted in Spain, and the king was preparing to raise his gold coins to $13\frac{1}{2}$ times the value of their weight of silver.

This he did in 1546. It caused a great outcry in America; in Flanders it did more, it organized the Revolution. The American colonists took refuge in evading the law. Instead of carrying their silver to the Spanish mints, they smuggled it away, whenever they could, to foreign countries, and whenever they could not do so, they fashioned it into illicitly-made coins at the risk of their lives. Silver change went to a premium and it became so scarce that in 1544 the Mexican colonists complained that no billon coins had been sent out from Spain. In 1560, according to Zurita, silver coins in Mexico had again become scarce; in 1565 one-fifth of the total silver product of

America was sent to the Philippines. "Mala moneda" is bitterly complained of in Hispaniola; so the mints were ordered to be overhauled. In 1586 relief was sought by the issue of leather notes in San Domingo and Puerto Rico. These, the first issues of leather or paper notes in America, and the first in the European world since 1364, were made by private individuals on their own credit and merely as a temporary makeshift. The coinage press was soon to come to their relief. In 1638, emissions of paper money were made in the same places; though not before the king of Spain had again (1579) raised the value of his gold coins, this time to 14.45 times the value of silver.*

In 1581 the weights and measures of New Castile and the vara of Old Castile were ordered to supersede the diverse weights and measures of the American viceroalties. In 1591, the American viceroys were authorized to furnish coined money in exchange for all silver bullion upon which the king's Quinto and other dues had been paid. This appears to have been a sort of countermove to the "individual coinage" of the Netherlands in 1572. However, so long as the Quinto and the other derechos were retained, the dangerous features of this legislation remained concealed.

In 1589-95 gold, silver and billon moneys were authorized to be struck in Hispaniola; in 1589, copper coins were also authorized to be struck in Hispaniola and Puerto Rico. This appears to be the first authorization of gold coinage in America. The same law (1595) fixed the following valuations: The gold escudo or ducat, 400; silver peso, 450; and silver real, 34, maravedis. Hence the peso went for 13 4-17 reals and the escudo for 11 13-17 reals. The escudo here mentioned was either a very small, or else a very debased one. In 1596 the colonial practice of exacting the king's dues in full weighted coins and paying the public expenses with light ones is forbidden; a sign that the clipping of silver coins had been resorted to as a means of defeating the king's repeated enhancements of the value of gold.

In 1603 the value of all billon and copper coins was doubled by decree in Spain. This decree brought about a virtual suspension of coin payments. The full weighted gold and silver coins were hurried out of the kingdom by every means that could be devised. The billon coins fell to 70 in the hundred; in other words, silver coins bore a premium of 40 per cent. The greatest confusion ensued; and the

* So it appears from the coinage law of 1579, cited in my *Hist. Mon. Sys.*, London, ed., p. 450. But the language of the law is so vague that on p. 476, no alteration was mentioned in the ratio since the 13 $\frac{1}{2}$ times of 1546. The ratio of 14.45, however, seems to be the more correct one.

Spanish-American viceroys, perhaps in order to make room for this debased coinage, closed their mints to that measure of individual coinage which was authorized by the decree of 1591. This closure of the mints was so hotly resented by the colonists that the Crown was at last forced to give way; and in 1608 was enacted that Decree, which, after it was given its full effect by the English law of 1666, at once altered all the monetary systems of the world. In 1608 the viceroys of Spain were authorized to coin money for Individual Account and without any more specific limit than they might deem necessary. The Quinto and the derechos were still retained; but under the British Act of 1666 all dues were abolished; and as it had now become comparatively easy to surreptitiously export silver bullion from Spanish America, the practical effect of the Spanish and English "free" coinage laws was to destroy the royal prerogative of coinage, elevate all bullion to coins and degrade all coins to bullion. The world-wide and mischievous effects of this legislation will receive abundant illustration as we proceed.

CHAPTER IX.

THE DUTCH COLONIES.

Tyranny of the Dutch colonial proprietors—The colonists are prohibited from coining their own money—Dutch monetary system—The colonists condemned to produce, but forbidden to trade—Failure of the Dutch colonies in America.

THE inhabitants of the Netherlands were always a liberty-loving people, and during the course of their long career, dating from the remote period when the Frisians were subjected to the galling exactions of their Roman conquerors, to the period when they threw off the yoke of Spanish tyranny, they offered to the world many proofs of this trait and made many sacrifices to achieve or maintain their freedom. But like the Pilgrim Fathers, who fled from intolerance in Europe to practice intolerance in America, the moment the Dutch settled in the new Continent they began to plant not trees of liberty but trees of feudalism and tyranny. The attitude of the proprietors towards the colonists was that of a master to his slaves, of a suzerain to his vassals. They imported titles of nobility, they established feudal manors on the Hudson and they compelled the settlers in a new and trackless country to employ a metallic monetary system which they themselves had rejected for the pasteboard dollars of Leyden. "Godt behoede Leyden" they had stamped on these symbols of their liberation in Holland. "God help the colonists" might with equal propriety been stamped on the coins which they ordered to be used in the Nieu Netherlands.

The Dutch system of money in the 17th century consisted of 12 copper ieschen, or eschen, to the silver stiver and 20 stivers to the silver ducaton or the gold guilder, a survival of the £. s. d. system which the Romans had planted in the Netherlands 15 centuries before. However, it was not the numerical relations of the coins that proved inconvenient and vexatious to the colonists, but the fact that they could only be procured in Holland and were liable at any time to be withdrawn from the colony and transported again to Holland. This contingency which always threatened to take place and which frequently did take place, rendered trade precarious, prevented

the development of credit and reduced the transactions of the colony to the smallest limits. In effect, the colonists were condemned to production and forbidden to trade.

Hudson discovered the river that bears his name in 1609; the West India Company was organized in 1621; and Stuyvesant surrendered to the British forces in 1664. The whole period of the Dutch in New York did not exceed 40 years. During this interval nothing whatever was done by the home government or the West India Company to place the colonists on their feet. They were expected to work and make profits for the company, that was all. Their own needs, their natural desire to increase, to become rich, numerous, powerful and free, these were matters which did not appear to concern the government of the United Provinces.

Owing to this short-sighted policy the Dutch colonies in North America never prospered. There was scarcely a moment when they could be advantageously compared either in wealth or enterprise with the neighbouring colonies from England. The contrast between them is marked as strongly by their monetary systems as by any other indication. While the British colonists had the enterprise and the courage to set up their own mint in Boston and thus attempt to liberate their trade from the thralldom of a distant king's prerogative, the Hollanders in Nieu Amsterdam were content to regard the relation between commodities and beaver skins or blue and white wampum as a satisfactory basis of exchange.

CHAPTER X.

COLONIAL MONEYS OF LOUISIANA.

Parallel between Louisiana and the Philippines—Mischievous effects of imposing a national money upon a distant colony—Difference between barter and purchase-and-sale—Monetary principles deduced from one are inapplicable to the other—Barter rests upon cost, while price rests upon demand and supply—Both equity and trade demand that monetary systems shall be strictly national and regulated by national law—Population and trade of Louisiana—“Country Pay”—The Mississippi Company—Its Bills of Credit—Their failure—Return to “country pay”—Pasteboard notes of 1735—Notes of 1747—Counterfeits—Retirement of the issues—Cession of the province to Spain—To Great Britain—To the United States—Its undeveloped condition.

DURING the 17th century certain Frenchmen, because they descended the Mississippi River in a canoe, laid claim on the part of France to the entire region drained by that river and its affluents; and after the name of their king, they called it Louisiana. This territory was greater than all the kingdoms of Europe put together; so that the few hundred Frenchmen who were sent to garrison the forts on the Mississippi, Ohio and Illinois rivers, no more governed it than the British and German garrisons at Hong Kong and Chao Kiou now govern the empire of China. To speak of the money of Louisiana is therefore to speak only of the money of the French forts and settlements. It did not express, as the British Colonial paper money did, the relations of value between the property, exertions and hopes of the colonists inter alia; it only expressed the relations of value between the property, etc., of the Louisiana forts and settlements and that of France.

If the American government of the recently acquired Philippines is to be no improvement upon the Spanish government of those islands, or the British government of the old North American colonies, then it were a waste of effort to point out the difference between autonomous and international money, or the mischievous consequences that are bound to follow an attempt to govern 10,000,000 of one race of people with institutions belonging to another race of people, living 10,000 miles across the sea. But if, as all philanthropists hope and many statesmen believe, the government of American Asia is to de-

velope a new and more hopeful chapter in the history of empires, it is well worth while at the present juncture to press the finger down upon those pages of history which mark this difference in respect to the important institute of money.

There exists at the present moment a numerous and influential class of business men, rich and respectable, yet entirely ignorant of history, or of the principles derived from history, who never heard of the law of 18 Charles II., c. 5, and are wholly unaware of the fact that the principles of money laid down in British economical works are all of them derived from that law and would cease to exist the moment that that law was repealed. Some of these business men even presume to teach legislators what they should enact in respect of money, and are working with suspicious zeal to establish what they pretend to suppose would be an international money. Well, there is no international money and there can never be one, any more than there can be an international *jus gentium*, or domestic law; for the law of money is a part, an important part, of the domestic law. It relates not to transactions between nations but between individuals and requires a national power behind it to enforce its observance.

The British law of 1666 permitted metallic money to be melted down to bullion or exported to foreign countries by private individuals. It also enabled the same bullion, or indeed any bullion, to be imported by private individuals and then ordered it to be coined by the government, free of charge, for account of such private individuals whenever and in such amounts as they required. At that period there was no other money except metallic money. The law of 1666 therefore surrendered the State prerogative of money into private hands; it nullified the decision of 1604 in the *Mixt Moneys* case; it enabled the merchants of London—many of whom at that time were shareholders in the East India Company—to increase or diminish the stock of money in the kingdom and so to raise or lower prices, at pleasure.¹ Whenever they desired to raise them, they had only to deposit their bullion at the mint for coinage and, when coined, to loan it out freely, which they took care to do only upon ample security. For this purpose they shortly afterwards organized the Bank

¹ "It is dangerous to the peace of the kingdom when it shall be in the power of half-a-dozen or half-a-score of rich, discontented, or factious persons to make a bank (an accumulation) of our own coin and bullion beyond the seas and leave us in want of money when it shall not (no longer) be in the king's power to prevent it." Speech of the Earl of Anglesey on the Bill of 1663, (the first of the series which culminated in 1666,) permitting the export of coins from the kingdoms. Cobbett *Parl. Hist.*, IV, 283.

of England. Whenever they desired to lower prices, they had only to call in their loans and sell their coins as bullion, either for plate or for export. By these reprehensible means, and until relief appeared in the form of joint-stock banks and paper notes, they reduced all exchange to barter; and it is from the principles of barter, and not from those of purchase-and-sale, that the economists of the following century distilled the ignorant, or else one-sided, opinions which now guide so many of the commercial and banking fraternity in England and America.

Barter is a condition of traffic that distinguishes a barbarous or semi-barbarous community. It consists of exchanging one thing for one other thing, out of hand. It is not related to the past, it is not related to the future, it has nothing to do with hopes, expectations or credit; it relates only to the present time; only to tangible things; only to things of which immediate possession can be had; it takes no heed of the value of like things elsewhere or at different times; it does not express the value of a thing as compared with all other things within reach, whether present or prospective, but only its value at the moment of exchange and as compared with the one thing for which it is actually exchanged. The basis of valuation in barter is cost of production; and it is this principle, which though true as to barter is false as to purchase-and-sale, which the economists have applied to money and which the banking fraternity have found it profitable to adopt as the foundation of their claims, arguments and pretensions in relation to money.

Purchase-and-sale is a totally different kind of transaction. It is that condition of traffic which belongs to a community in the highest stage of social development. It consists not in exchanging one thing for *one* other thing, but one thing for *any* other thing, at pleasure of the seller. The medium of this operation is money; and money can only perform it equitably when its stability of value is anchored in the law and not in the vagaries or avidity of bankers. As the stability of money relates both to past, present and future, so does purchase-and-sale; and as stable money is a measure which inspires confidence and stimulates exertions which relate to the future, it becomes a basis of credit, of hopes, expectations and arrangements, often extending far into the future; for example, a 999-year lease, or an interminable loan. Purchase-and-sale may relate to the most intangible things, as copyright, patent-right, trade-mark, a right of action, a pension, a marriage-settlement, etc. In all cases of purchase-and-sale the value of the thing purchased is compared in the

mind with the value of like things and of other things elsewhere and at other times, both past and prospective. The mind of the buyer becomes a market in which every conceivable thing is offered for sale to him and in which that thing is selected by him which most suits his needs, means, taste, interest, or caprice. The basis of valuation in this extensive market is demand and supply. The buyer does not know, nor does he care, what the thing costs which he buys; the seller does not know, nor does he care, what the money cost for which he sells his services, goods, or rights. Plentifulness means low prices, scarcity means high prices; and this principle relates as well to money as to the things for which money is exchanged.

The bewildering consequences of a mode of valuation which involves the consideration of the demand and supply of *everything* are vastly reduced by the operation of law. In the first place, only those things need be considered of which legal possession can be enforced by the courts. This substantially limits the market to the national territory. In the second place, only those things need to be considered of which possession can be acquired at the time and place where they are wanted. Even did not equity require that the measure of value should, like other measures, be limited in volume, these limitations upon the number and variety of things which valuation by means of money compels the mind to hold in view simultaneously, call for a corresponding limitation with respect to the volume or supply of money. That, too, has to be subjected to the restraint of national regulation; otherwise the entire network of valuations, which means the entire social order, might be rendered a prey to foreign laws, combinations and conspiracies. ³

At the time when Louisiana first had a population sufficiently numerous to entitle her monetary affairs to consideration, namely, in 1720, the British North American colonies had a population of over a million and an extensive trade on the Atlantic seaboard and with the West India islands. This trade demanded a supply of money, not "international money," subject to be withdrawn by the mother country or by foreigners, or melted down to plate or fashioned into jewellery; but a stable volume of money, to remain in the colonies and equitably measure value; in other words, to fix prices with more or less constancy and thus to form the basis of colonial trade, production and credit. Failing to obtain such a money from the mother country, the colonists set up a mint of their own; and when, contrary

³ I trust that the accomplished author of "A Colloquy on Currency" will read this paragraph very carefully.

to their expectations, the issues of this mint flowed out of the colonies and defeated their object, they established a paper system. This nominally began in 1690, but substantially, not until after the beginning of the 18th century. In the course of a single generation this system, though in many respects defective, built these colonies up into a nation, strong, self-reliant and possessed of such vast resources that prudent and generous management on the part of the Crown would have rendered them the chief reliance of British commerce, wealth and power.

But the narrow-minded and selfish London merchants and bankers, who influenced the government at this period, would not permit the colonies to have their own monetary system; they must accept such "national" coins as the London merchants choosed to lend them; as though there was anything "national" about coins which were manufactured at their own (the merchants') private behest and could be withdrawn, melted or exported at their own pleasure. Accordingly orders were sent to America to put down the Colonial money and enforce the falsely-named "national," but really private money. As shown in another chapter of this work, it was the enforcement of this policy that brought on the Revolution and the loss to Great Britain of an empire which has since become the richest in the world.

The American Republic is now itself becoming a mother of states, and a possessor of colonies. Cuba and Puerto Rico are too near and their population is too small to render it necessary (at all events at present) to consider their need of a separate monetary system, But the case is different with the Philippines. They are both distant and populous; and they stand in the very channel of that envied Asiatic trade which has ever been a source of contention between the rival states of the Occident. The local inter-insular trade of the Philippines is alone important; and with a suitable currency, wholly disconnected with the American monetary system, it is susceptible of enormous extension. Out of this local trade would naturally flow a vast and lucrative commerce with the United States. But if the American monetary system is forced upon these islands, as the merchants of London forced theirs upon the North American Colonies, the result will either be what the result has been with Spain, a mere nominal control of the islands, subject to foreign interference and seizure at any time, or else what it was with British America century ago: namely, the revolt of the colonists and overthrow of the colonial government.

If it be asked why the Philippines cannot prosper with the Ameri-

can (or any other distant) monetary system, the answer is this: the tendency of money is always to flow towards the place where it circulates most rapidly, where it is used and re-used most frequently, where it can be loaned most readily. If the Philipines are compelled to accept the American monetary system, the inevitable consequence will be that the money, whether of gold, silver or paper, will flow to Chicago, New York, Boston and Philadelphia; and there remain. Such is the case at present with respect to the money of the Southern and Western States of the Union. Its tendency is to flow to the Eastern cities and there remain. But these states are not within the sphere of foreign influence; they can therefore only suffer, protest and agitate for reform. With the Philipines it is different. When they find themselves, as they will be sure to do, bereft of a sufficient circulating medium, when they find that their coins have gone to the United States, they will demand a local mint; when experience proves, as it has proved in Australia, that a local mint will fail to prevent the flow of coins to the commercial centres of the mother country, they will demand local banks of issue; and when this expedient fails, as fail it certainly will, they will seek the aid of foreign powers to liberate them from a thralldom which shifts their commerce to a distant bourse and condemns them to industrial and commercial inertia.

From this digression we return to Louisiana. The first permanent settlement was made in 1699. In 1708 the French and Colonial population only numbered 279; in 1712, 520; in 1721, 5,420; in 1724, 5,000; in 1731, 7,540 and in 1770, 13,538 persons³. Until Crozat purchased the territory—this was in 1712—the media of exchange in Louisiana consisted of maize, tobacco, rice, etc.; in a word “country pay” measured in French money and supplemented by a few French coins. During the Crozat administration, which continued until 1717, the media of exchange remained the same, except that the proportion of coins was greater. From 1717, when the Mississippi Company assumed the government of the Colony, until 1731, when such control was relinquished, the money of the Colony consisted mainly of the Bills of Credit issued by the Company, printed in France and countersigned in Louisiana. These were supplemented by billon and copper coins, whose contents of metal and legal valuation were frequently changed by royal ordinance. Finally, there was a small amount of Spanish silver dollars and gold pistoles in circulation, whose value, as measured either in French coins or in the Bills of the Company, frequently and greatly varied.

³ Gayarré's Hist. Louisiana, 1, 99, 115, 273-4, 351-2, 366, 454.

In 1722, owing to the failure of the Mississippi Company in France, the Bills of Credit received a fatal blow; and although they continued for some time afterward to perform the functions of money in Louisiana, such functions became gradually impaired until the colonists would receive them no longer; and coins, both French and Spanish, usurped their place in the circulation. But, as the supply of such coins was not subject to the colonial authorities, there was no stability in the monetary measure; credit was destroyed, trade languished and production halted at the line of immediate and local demand.

In 1735 an effort was made to relieve the Colony of these depressing circumstances by issuing certain local bills of credit printed on pasteboard, but as these issues were not authorized by the colonial government, nor receivable for taxes, they lacked credit and commanded only a very limited circulation.

In 1747 another issue was made of somewhat similar character, this time under authority of the local government, but without the sanction and indeed in opposition to the very decided policy of the Crown and therefore not receivable for taxes. In 1750 this issue was largely counterfeited, when it rapidly lost credit and ceased to circulate.⁴

In 1762 Spain acquired the province by secret treaty with France, though full possession was not taken until 1769. Meanwhile in 1763 all of the province east of the Mississippi river, south to the 31st parallel, was ceded to Great Britain, and in 1783 it fell to the United States. The western and southern territory remained in possession of Spain until 1800, when it was ceded to France, who in 1803 sold it to the United States. During this interval of oft-changed masters, the trade of this magnificent empire, chiefly from the lack of an autonomous money, remained undeveloped. The great river stretched its arms to the remotest extremities of the Continent, irrigating its untilled valleys and offering its mighty waters to the service of industry; but no advantage was taken of this vast bounty of nature. The inhabitants sat in their bungalows and said to each other: "Let us wait until the goldsmiths of Paris send out some of their coins with the king's head stamped upon them. These coins will connect us with beloved France. The owners of the coins will fix a price upon our corn, sugar and tobacco, at which it will be profitable for them to purchase these products, and transport them to France for sale.

⁴Gayarré, II, 21, 51-3, 160. There is reason to suspect that the royal officials were not over zealous in detecting and punishing the forgers.

Even should such price fail to prove remunerative we ought yet to continue to produce corn, sugar and tobacco; incidentally we can go out and amuse ourselves by shooting Indians. In any case we shall have to live in indigence. It is the Planter's Burden and we must carry it as best we may!"

No people need assume a Burden which is not of their own making. The planters of Louisiana were not obliged to wait upon the gamblers of the Rue Quincampoix, nor submit to their monetary control. The Colonists had the power, as certainly they had the right, to throw it off, by creating their own monetary system. This is what the British Colonists did and this is what the French Colonists should have done. There was plenty of room and abundant opportunity to set up a Mint in the Mississippi Valley; and had one been established there it would, beyond a doubt, have been amply supplied with coining metal by the Spaniards of Mexico and the buccaneers of the West Indies. But the spirit was lacking and it has hardly yet become aroused. A century ago the people of the Mississippi Valley were content to be led by the bankers of Paris. To-day, they are hardly less content to be led by the bankers of London. They never had the daring of that Hampden who refused to pay an unjust tax, nor of that Hull who courageously set up his little mint in Boston and defied the royal authority by striking American coins for an American people. But their patience is becoming exhausted. The recent commercial conventions of the Mississippi and Trans-Mississippi have unmistakably demanded that the Federal government shall undertake the entire control of the American monetary system, and sooner or later the people of the North and East must, in their own interest, second this eminently just demand. The Buffalo Conference has already led the way. It is for Chicago and New York to follow.

CHAPTER XI.

BRITISH COLONIAL MONEYS.

Idealism of the Colonists—Yearnings for Freedom and Justice—Ignorance of Monetary Laws and History—Pine Tree Money—Contest Between British Capital and American Labor—Efforts of the Royal Authorities to repress the Tree Money—Drain of Silver to England—Country Pay, or Barter—Colonial Bills of Credit—Counterfeits—Efforts of the Royal Authorities to repress the Colonial Bills—The Colonists demur—Private Bank Notes—Contraction—Old, Middle and New Tenors—The Crime of 1742—Severe Contraction—Popular distress—Symptoms of Revolt—Interest-Bearing Certificates—Efforts of the Royal Authorities to repress them—Victory of the Colonists—The Revolution.

MANY histories have been published of what the British Colonies *did* and at least one history has been written of what the people *did*, but as yet not one of what the people *thought*; yet this is the most important of all, for the British Colonies were settled during the Halcyon Age of England, and this was pre-eminently an age of new ideas, inventions, discoveries and projects.

“This was the age of Sir Thomas More’s ‘Utopia,’ 1516; of Bodin’s ‘Republic,’ 1577; of Raleigh’s Roanoke colony, 1585; of Hall’s ‘Crapulia,’ 1600; of Campanella’s ‘City of the Sun,’ 1625; of Bacon’s ‘New Atlantis,’ 1625; of Harrington’s republic of ‘Oceana,’ 1657; and of Locke’s experimental government in Carolina. Not only did poets and philosophers dream, and statesmen plan reforms of government, the commercial classes demanded them, and the people struck for them. An insurrection occurred in Castile, 1520, and a popular Junta was established, 1522; a popular insurrection against devoting agricultural lands to pasture, took place in England under Ket and Flowerdew in 1549; a republic was declared in Holland, 1572; the peasantry rose in Austria, 1626; a republic was established in England, 1645; and the barricades of the Fronde were erected in Paris, 1648.”

These literary and revolutionary works tore away the restraints that had confined European thought for twenty centuries, and reverted to the freedom of the Greek and Roman republics. Judge Chamberlain, in a clever review of McMaster’s “History of the American People,”

has wondered whence Jefferson got his idealism; and he fancies it may have come from Rousseau and the French writers of the 18th century. He will find much of it in the authors of that great æra which preceded and gave birth to the French encyclopedists.

The British Colonists brought few books with them. Among those were the Bible, the book of Common Prayer, the writings of Cicero and the works of Aristotle. I remember very distinctly of being informed by one of my grandparents, who was a Southerner and a contemporary of Jefferson, that the philosophy of Aristotle was read and taught in the Colonial schools. Much of what was taught was doubtless lost, but in some minds the seed must have germinated. Here was a fount of idealism as pure and deep as any that man has ever plumbed; and at the very bottom of it, deeper and more profound than any idealism of the Renaissance, will be discerned this greatest of all generalizations on the subject of money. "There would be no society if there were no exchange and no exchange if there were no money."

If it be doubted that the Anglo-American Colonists were governed in their political arrangements by ideas so ancient as those of Aristotle, it will scarcely be contended that they were ignorant or heedless of the ideas which governed the great *Mixt Money Case* decided by the Privy Council in 1604: "Money is a public measure (*mensura publica*) intended to obviate the inconvenience and iniquity of Barter. There can be no society without exchanges, no system of exchanges without equity and no equity of exchanges without money." These are the ideas, nay almost the very words of Aristotle; indeed the decision cites by name both Aristotle and Bodin. This decision was especially applicable to the Colonies; and its principles must have formed part of the education of every lawyer, jurist and statesman in America.

We shall find as we proceed that these principles had more to do with the relations between England and her Colonies than any other ideas which influenced them. The whole story of the rebellious Colonies is a story which relates more to monetary contentions and principles than to any other subject. The English of that period, like the English of to-day, were a people comparatively destitute of idealism; and it required, as it still requires, a prodigious effort to goad into action their eminently sound but pre-eminently conservative minds. After a century of unexampled prosperity and brilliant progress in England, due, as has been shown in another work, to the stimulus afforded by the influx and coinage of silver from Spanish

America, the English Parliament was so stupid or criminal as to pass the East India Company's Mint Bill in 1666 and thus permit the country to be drained of its Measure of Value by a band of adventurers. Some of the disastrous consequences that ensued have been eloquently described by Macauley; but nobody thought of repealing the Act and nobody thinks of it yet; the profits of the Bank of England and other banks of issue standing in the way. It was in the midst of the first drainage of silver to the Orient, when the coins of England were clipped and sweated to two-thirds or one-half their original weight, that the American Colonies were first brought face to face with the great subject of Monetary Law. It need hardly be said that this was a subject concerning which they were profoundly ignorant.

The early trade of the Colonies had been effected by barter, but by the last quarter of the 17th century the population had grown too numerous, widespread and differentiated in occupation to render such an archaic system of exchange any longer practicable.

So early as 1652 (October 19) the province of Massachusetts found it necessary—for it was no mere act of wantonness or of profit-seeking by the colony—to defy the Royal authority by erecting a Mint and striking Pine Tree shillings. These were to contain $66\frac{2}{3}$ gr. fine silver, the same as the actual circulating clipped shilling of England, though not the same as the theoretical or minted shilling of the Commonwealth, which should have contained about $85\frac{3}{4}$ gr. fine.

From this moment began in America a contest between Barter and Exchange, between Capital and Blood, between the Plunder of the Seas and the Credit of the Colonies, between the Metallic product of slavery and the Fiduciary issues of a free people, that has not yet ended and that never will end until the principles which Aristotle distilled from the republics of antiquity have again asserted their vitality in the halls of legislation. These principles were revived in the Mint Money case in 1604. They were affirmed by Bastiat in 1840: "Exchange is political economy; it is society itself, for it is impossible to conceive of society as existing without exchange, or exchange without society." They were again affirmed by Destutt Tracy in 1870: "Society is in fact held together by a series of exchanges." And they will be again and again affirmed until they are nailed inseparably to the Constitution of every free State in Christendom. "Exchange is a social act; money is a social mechanism; it is a public measure of value, the unit of which is not one coin,

nor one note, but all the coins and notes of like currency under the law of each nation when added together; money to be equitable must be of stable volume; stability can only be secured by national authority and limitation; if you want prosperity you must trust the national government to conserve the Measure of Value; if you fear to trust the government, you may indeed preserve the size of the coin in your pocket, but you cannot secure the profits it may earn for you; and persistence in this course will force ruin upon others and probably upon yourself.

During the interval between the first issues of Pine Tree money and the Revolution, these principles were brought home over and over again to the Tory classes in America, but without avail. The Tories affected entire disbelief in the Quantitative Theory of metallic money, yet they always wanted the quantity of metallic money reduced; they derided paper money when it was issued by the Colony, but vaunted it when issued by themselves. Because they could buy the votes of certain individuals they mistrusted the body politic. This was a grave mistake; for the body politic taken collectively is a totally different entity from the individuals of which it may be composed. It acts upon entirely different principles; and so does Money.

The Pine Tree coins were at first of the denomination of 12, 6 and 3 pence, and in 1662 also of 2 pence. All except the 2 pence pieces are dated 1652, although they were continued to be coined every year until 1686, about which time paper money began to be thought of. The shilling was ordered to contain 72 grains of standard silver, (0.925 fine) or $66\frac{2}{3}$ grains of fine silver. The extant coins in the best preservation contain about $60\frac{2}{3}$ grains fine; that is to say, about three-fourths as much fine silver as the newly minted Royal shilling of the same period; and at this valuation they were made legal tender by colonial law and readily passed current. The seigniorage on the Royal coins was 2 shillings in 60 shillings, or about $3\frac{1}{3}$ per cent.; on the Colonial coins it was 1 shilling in 20 shillings, or 5 per cent. ad valorem; so that in fact the Crown manufactured coins at a cheaper rate than did John Hull.

From the moment of the authorization of Hull's mint by the Colonial Legislature, an event which dates from the period of the Commonwealth in England, to that of its suppression, which was achieved during the reign of William and Mary, an incessant warfare was waged, now by the colonial Tories and then by the Royalists in England, against American money. Its coinage defied the Royal

prerogative; it was the money of treason; it was coined from piratical plunder; it was dishonest money; it lowered the Royal standard; it inflated the currency; Hull's charge for coinage was exorbitant, etc. Much of this was true; yet except the first one or two, these charges were equally true of the British shilling of that day. That also was struck from plundered metal; it was therefore dishonest; it had been recently degraded; and was even clipped and sweated. Worse still were the tin coins struck for the American Colonies by James II., 1685-88, of which 192 were ordered to pass for a Spanish peso, or 24 to the real de plata. But in those days there was a great difference between my ox and yours.

The contest over the Pine Tree money was afterwards merged into a greater contest over the Colonial Bills of Credit which arose after and by reason of its suppression. This will receive some further notice when that later usurpation of the Royal prerogative comes to be mentioned.

The Colonial mint (or mints, for I fancy there was another, though a smaller one, in Maryland) was an open one; that is to say, it coined, or professed itself willing to coin, all bullion offered to it for that purpose. Such coins were declared to be legal tender by the Colonial assembly. As the mint did not coin gratuitously, it might be supposed that the seigniorage was enough to keep the coins from being melted or exported. But such was not the case; for although several hundred thousand, perhaps a million or more pounds sterling worth of Pine Tree money was struck from first to last by John Hull, it was all or nearly all exported; and very little of it remained at any time in circulation. One reason for this was that until 1666 the Royal mint also charged a seigniorage; and a second reason was that the West Indian buccaneers, who were the largest depositors at the Boston mint, wanted their remittances promptly returned to them in coins. The result was that the Pine Tree money flowed out of the country almost as soon as it was coined. Much of it was subsequently melted in the mints of Europe.

For these reasons so few coins of any kind remained in circulation during the Pine Tree money emissions that this period may more fitly be embraced in a longer one, 1632-92, during which the principal medium of exchange was obliged to be "country pay," that is to say, merchandise at prices fixed from time to time by Colonial laws.

To enter into details of this wretched system of barter would neither conform to our present limits of space, nor serve any other useful purpose than to corroborate by tedious evidence, the truth of

the principles herein advanced by generality. Suffice it to say that the result of being obliged to employ "country pay" was to cramp the trade of the Colonies into the smallest limits and to render impossible any progress of the people beyond the phase of hard manual labor, variegated by neighborly "swaps." Commerce with distant persons or markets was impracticable; transportation was undeveloped; credit was unknown; the marts and the profits of American trade were transferred to London and there they remained.

"They give the title of 'merchant' to every trader, who rates his goods according to the time and species they pay in; viz., 'pay'; 'money'; 'pay-as-money'; and 'trusting.' Pay is grain, pork and beef, etc., at the prices set by the General Court. Money is pieces-of-eight, ryals, Boston or Bay shillings, or 'good hard money,' as sometimes silver coin is called; also wampum, viz., Indian beads, which serve as change. Pay-as-money is provision aforesaid, one-third cheaper than the Assembly set it; and Trust, as they agree for at the time. When the buyer comes to ask for a commodity, sometimes before the merchant answers that he has it, he says, 'is your pay ready?' Perhaps the chap replies, 'yes.' 'What do you pay in?' says the merchant. The buyer having answered, then the price is set; as suppose he wants a 6d. knife, in 'pay' it is 12d.; in 'pay-as-money' 8d., and 'hard-money,' its own value, 6d. It seems a very intricate way of trade, and what the *Lex Mercatoria* had not thought of." *Journal of Mrs. Knight, New Haven, A. D. 1704.*

But beneath this enforced archaism there were ideas; and in the inventive minds of the Americans these soon took form. The leather moneys of mediæval Europe were probably unknown to the Colonists; even the paper issues of Milan and Genoa may have been unheard of, or but dimly understood; but such could hardly have been the case with the leather and paper moneys of San Domingo issued about the year 1638, the Swedish "Transport Notes" of 1658, or the notes issued by Cromwell at about the same time. At all events a Land Bank was organized in South Carolina which issued "convertible" notes upon the security of estates, somewhere about the year 1675. The example was eagerly followed in Boston, where in 1686 John Blackwell and six other persons, one or more of whom were from London, established a Land Bank and issued their private notes "payable" in coins and "secured" by land. Either the "security" of these notes proved to be inadequate or doubtful, or else some other circumstance affected their credit; the fact is that the notes failed to become acceptable to the public and soon ceased to circu-

late as money. Whether they were paid off or repudiated does not appear.

Soon after this abortive attempt to introduce private promissory notes into the circulation, the Colony of Massachusetts resolved to relieve "the scarcity of money and the want of an adequate measure of commerce" by issuing its own Bills of Credit to the modest extent of £7,000. This was done in February, 1690, the notes bearing the following legend:

"No. (916) - - - - - 20s.

This indented Bill of Twenty Shillings due from the Massachusetts Colony to the Possessor shall be in value equal to money, and shall be accordingly accepted by the Treasurer and Receivers subordinate to him, in all payments and for any stock at any time in the Treasury, Boston, in New England, February the third, 1690. By order of the General Court.

[L. s.]

ELISHA HUTCHINSON, }
JOHN WALLEY, } Comitee."
TIM THORNTON, }

It was afterwards repeatedly alleged that this was a "war issue" to pay off the soldiers in the Phips expedition to Quebec, and therefore it was but just and proper to retire it as soon as practicable. Without entering into this sort of reasoning, because it is a non sequitur, the fact is that the issue of notes was made not only before the Phips soldiers demanded to be paid, but before the expedition sailed and indeed before it was planned. The notes were issued early in February, 1690; the expedition to Quebec was not resolved upon until May 1st; it sailed August 9th, landed and was defeated October 8th, re-embarked October 11th and arrived in New England November 19th. The soldiers' demand for pay was fully a year later than the date when the Bills of Credit were authorized to be issued.

In 1691 a further issue was made of Colonial Bills of Credit and in these notes some of the defeated heroes of Quebec were doubtless paid off, a circumstance which, however, has nothing to do with the question of their origin or justification.

It will be observed that the Bills were not money; but merely promises to pay money; in other words, they were not legal tender; nobody was obliged to accept them outside the Colonial Treasury. All this was changed after the new Charter of 1692 became effective. The provincial government then, July 2, 1692, made the notes, now amounting to £30,000 or £40,000 full legal tenders, except in special contracts. Under these circumstances they circulated at par with

silver coins (the parity being 8 shillings per "ounce" of standard silver coins) until 1712, a period of twenty years, during which time the population of the Colony more than doubled and the trade increased enormously.

By the year 1712 a large increase in the issue of these notes and the admission of other elements into the currency, both foreign and Colonial, metallic and paper, occasioned the depreciation of the notes and clipping of the coins to the extent of about one-eighth. Counterfeit notes of Massachusetts, New Hampshire, Connecticut and Rhode Island also swelled the total.

In 1714 the Colony of Massachusetts made a new and further issue of provincial notes commencing with £50,000 which was soon increased to £125,000. A private bank of issue based upon landed assets was also authorized between 1714 and 1720. In 1692 the population was about 47,000, the note circulation £30,000, and silver coin 6 shillings 10½d. in paper notes per "ounce." In 1728 the population was about 115,000, the note circulation £400,000, and silver coin 16 shillings per ounce. These excessive issues and the bursting of the Mississippi Bubble in France now led the government of England to interfere. It commenced in 1727 that series of repressive measures which furnished the first distinctive provocation to the American Revolution.

These measures were not undertaken so much with the view of reforming the currency of the Colonies as of enforcing the prerogative of the king, which would have been right enough in England but wholly indefensible when applied to a distant colony. However, this object was sought to be accomplished by means alike offensive and oppressive. The Colonial governors were ordered to sign no more laws authorizing Bills of Credit; the outstanding Bills of Credit were ordered to be withdrawn; the taxes were ordered to be paid in coins; in short, without a single extenuating reason, the British ministry followed in America precisely the same steps that after the downfall of John Law were pursued with such fatal results by Louis XV. of France. When in 1727 Gov. Dummer refused to sign an authorization for £50,000 of new bills to help pay off £100,000 of old bills, the House of Assembly declared that **THEY CONSIDERED THEIR LIBERTIES THREATENED.** The Governor's reply to this note of alarm was to force the House in 1728 to further contract the currency.

In 1730, Gov. Belcher was appointed by the Crown with imperative orders to go on with the contraction until the note currency was

reduced to £30,000. The Colonial Assembly again and again petitioned the Crown to revoke this ruinous order, but without avail. The method of contraction rendered it still more objectionable. The notes were not retired by paying for them with a surplus of coin in the Treasury, for there was no such surplus. They were to be paid off from the proceeds of new and additional taxation. On top of all this was another grievance; the void in the circulation was to be partly filled by the notes of private banks, which were authorized to be established upon a "silver basis" by the favorites or dependents of the English governor, such notes having no legal tender quality. In 1737 the provincial notes had been reduced to not much over the £30,000 limit, and the private bank issues were about £110,000; while the other elements of the currency hardly brought the whole to much more than half of what it had been before contraction began. In 1735, the worst period of contraction, money was so scarce that the inhabitants could not, even when threatened with a forced sale of their goods, pay their taxes, except in commodities; and the governor reluctantly accepting the situation, agreed to receive the taxes in hemp, flax and bar-iron. It reminds one of the ox-hides exacted by the Roman governor from the Frisians sixteen hundred years previously.* The discretion with which such a system necessarily armed the collecting officials must have afforded the latter opportunities for exercising the most galling oppression.

We have no space for entering upon the intricacies of Old, Middle and New Tenor bills, nor for considering the influence of the Merchants' Bank notes, nor of the municipal notes of this æra† upon the circulation; it is far more important to trace the Equity or Demonetization Act that, in 1742 Gov. Shirley tricked the Colonial Assembly into passing.

This Act contained a clause which read: "If they (the Colonial Bills of Credit) depreciate, allowance shall be made accordingly," a clause whose significance seems to have escaped the attention of the Assembly. Its practical effect was to demonetize the Colonial bills and make all contracts payable in standard silver coins at 6s. 8d. per ounce, or in so much paper money as would purchase this quantity of silver coins at the time that payment was made. Nothing could have been more iniquitous.

* See "History Monetary Systems," ch. V.

† I have seen a circulating note dated Ipswich, Massachusetts, May 1, 1741, for some small amount, in possession of my friend Mr. L. L. Robinson, of San Francisco.

Shirley's next move was to induce the new "Land Bank" to retire its issues, amounting to £40,000. Similar pressure caused the "Silver" banks to retire their notes, amounting to £120,000. As this process went on, the grip upon the people gradually tightened; and from this they sought relief by according "free course," or currency, to the Provincial Bills of the contiguous Colonies. But here again they were defeated by the governor's untiring zeal and energy in the cause of contraction. Under the threat of losing their Charter, he induced them, partly in 1744 and partly in 1746, to relinquish this last resource. The results that followed were most distressing. Prices fell, trade became stagnant, securities depreciated and loans were recalled; debtors were sold out by the sheriff; "many good families were brought to poverty"; and cries of distress arose on all sides. The governor was petitioned to repeal the misnamed "Equity Bill," but he refused; the representatives appealed to Parliament, but met with no relief. The fiat had gone forth; the king's prerogative of the coinage, though surrendered in England to the East India Company was to be maintained in the Colonies; the latter were to have no monetary system of their own; and, under the operation of the British Act of 1666, the goldsmiths of London and their newly fledged and already embarrassed Bank of England, were to rule the situation.*

What is expansion? It is forcing into circulation an unusually large volume of money, or else exposing it to be so inflated. What is contraction? It is reducing the volume of money, or exposing it to be reduced below the customary amount in circulation. The swollen measure of value is quite as unjust as the shrunken measure. There is no necessity for either; but so long as a nation neglects to regulate by law the volume of its currency, its people will always live in danger of one or the other of these inequitable measures of value, the swollen one or the shrunken one. After such an unjustifiable expansion as had been caused by the provincial bills of credit, it did not appear to be at all inequitable to pay off the bills in coins and return to coin payments; for everybody assumed that the coins would remain in the Colony and supply the place of the bills. But such was not the case. The Colony was in debt both to the subjects and the government of the mother country; and as fast as the coins entered the circulation as a measure of value in Massachusetts, they were shipped to London as a commodity to meet the bills of exchange

* The Bank of England has failed several times, the first failure having occurred in 1696.

drawn by the depositors of the bullion and eventually to feed the open mint in the Tower. The Resumption Act, approved by the king, June 28, 1749, was therefore not a mere contraction; it was a terrible calamity.

The Act was followed by a sop to Cerberus, in the shape of a shipment from London of 653,000 ounces of silver and 10 tons of copper coins, due to the Colonial government, for the expenses of the Phips expedition. The Colonial government nevertheless was ordered to pay these coins out only to redeem its own Bills of Credit and at a discount prices, and to demand payment in coins for taxes and dues at par. This operation was commenced in 1750. By itself it would seem both fair and harmless, but in connection with Shirley's surreptitious demonetization of the Colonial bills, previously mentioned, it converted all debts created at inflation prices into obligations payable during the prevalence of contraction prices—a contraction enormously aggravated by the constant tendency of the coins to flow out of the Colony to the mother country. The result was a complete revulsion of fortune among every class of Americans. The favored official or lucky adventurer became rich, the industrious trader was impoverished, the creditor was lifted up, the debtor was cast down; and every sort of injustice was committed under cover of law. Worse than all, while the inflation had been gradual, and covered a period of many years, the contraction was made both sudden and severe.

The Land and Silver bank notes were already retired; the provincial notes of the other American Colonies were decried; and £420,000 of Massachusetts bills, which though demonetized in 1742 were still in circulation, were bought up and retired with about £40,000 in coins. The effect was frightful. Ruin stalked in every home; the people could not pay their taxes; and were obliged to see their property seized by the sheriff and sold at one-tenth its previous value. Commerce was annihilated; and in its place was substituted a petty barter that was maintained with "country pay." Even the taxes were obliged to be collected in kind. In the face of this great distress the governor relented so far as to permit £3,000 in small notes to be issued for change; but from the beginning to the end of his administration he never faltered a moment in the execution of the orders he had received; and these were to destroy the fiduciary issues of the Colonies without regard to consequences. The Colonists were to create wealth; it was reserved for Englishmen to exchange and enhance it.

Driven into a corner and deprived of all hope of such a stay of prices as would enable them to effect their exchanges and pay their debts without sacrificing their entire fortunes, the people replied to these measures with subterfuge, violence and defiance of the law. In 1755 large quantities of base coins were imported from France; in 1760 counterfeit "cobs," or dollars, were fabricated at Scarborough; in 1761 the Assembly admitted that counterfeiting had become rife; and in 1762 it was deemed necessary to pass an Act with almost capital penalties against the commission of this offense. In 1751 a Riot Act was passed to suppress the outbreaks occasioned by the Resumption Act; tumultuous assemblies occurred in and near Boston; and the people of Abingdon broke into open revolt.

At this point the Royal government made a concession. To have refused to make it, would have precipitated the Revolution at once; for the people had been pushed to the last point of forbearance. Says a writer on the currency: "Their prosperity had been checked, their trade destroyed, their property sold under the hammer, many of them had been driven away and the remainder were oppressed with a load of taxes which were payable in unattainable coins. They were ripe for revolt. The concession now made to them merely postponed the Revolution; it did not remove its causes."

On April 24, 1751, a bill had passed the Assembly authorizing the Treasurer to liquidate the current expenses of the Colony by the issue of interest-bearing certificates of indebtedness in denominations of £6 (afterwards £4) payable in one year. To this bill the governor had yielded a reluctant consent. Its operation afforded immediate relief to the affairs of the Colony, for to the surprise of the governor and possibly also to that of the Assembly, these certificates circulated freely among the people as money. So soon as this practice became known in London it was attempted to be stopped. In June, 1751, the Parliament of England forbade the circulation of the Colonial debt certificates as money; and to leave no excuse for thus employing them, measures were taken to encourage loans of metallic money to the Colony of Massachusetts upon long bonds, which were to be liquidated out of the proceeds of future Colonial revenues. But loans of money with a string tied to each coin was not what the Americans desired. They had had enough of that sort of relief. Their Treasurer's certificates were quite good enough for them; and in spite of Parliament, these circulated as money so freely that by the year 1766 not less than £157,000 in this "illegitimate" currency was afloat. Mr. Felt hints at a much higher figure,

but I can see no reason to follow him. The emission of these notes eventually led to such an improvement of affairs that in 1774 Gov. Hutchinson remarked in his message: "There never has been a time since the first settlement of the country when the Treasury has been in so good a state as it now is." But the Colony had not forgotten the sufferings it had endured through the monetary policy which this very man had done so much to enforce; and at the moment that he wrote this complacent sentence it was preparing to throw off forever the shackles which had been imposed upon it by British policy and British legislation. All that was needed was a plausible pretext, and that it found in the Stamp Act.

The monetary history of the other American Colonies possesses so many features in common with that of Massachusetts that in this work it is not deemed necessary to follow it. Said Mr. F. P. Dewess in a letter on this subject written November 7, 1895: "In the early days of Virginia, the policy of England had drained the Colony of metallic money. A medium of exchange was necessary. Scrip was issued receivable in payment of taxes. The amount issued was triple the amount of taxes required to be paid, but there was a use for the scrip other than the payment of taxes, and the whole of it constituted a useful circulation, notwithstanding that there was no coin redemption. Prior to the Revolution, by reason of the drainage of metallic money, legal-tender Bills of Credit were issued by the several Colonies. With this as money, prosperity followed. An attempt was made by England to abolish this currency and the discontent following, among other causes, precipitated the Revolution."

With the breaking out of the Revolution the monetary history of the American States took an entirely new turn. We have hitherto dealt with the Pine Tree Coinage and the Colonial Bills of Credit. We have next to deal with the Continental notes.

CHAPTER XII.

WAMPUM.

Wampum were used by the Indians for ornaments and mementos ; by the whites and afterwards by the Indians, for money—Bermuda copper coins of 1612—Country pay and wampum the principal medium of exchange until paper money was adopted.

SOME authorities have held that among the American Indians, and upon those occasions when exchange was not effected directly or by barter, there circulated bits of agate, cornelian, jasper, chalcedony, bone, and shells, which, being generally prized among these isolated and warring people, rudely fulfilled the office of money. With the more advanced tribes of Indians, those who followed a leader of something more than local sway, or who, one with another, possessed some common policy of life, and whose habits were more social or more commercial than the rest, the usual measure of value is said to have been wampum.

It is unfortunate for this view that the facts do not altogether agree with it. The bits of stone alluded to were not money. They had no common currency among the Indians, either through the force of law or custom. They had no commonly recognized value, however rude or variable. They had no mark of authority. They had no common denomination; no common stamp or seal; and no Indian could be compelled to accept them in trade; in short, they were not "legal tender" among the natives. They were objects of barter, not media of purchase-and-sale, and when once they exchanged hands there was no assurance that they would be accepted a second time.

Exchanges among the Indians were very rare, for they had but little to exchange. Such exchanges were commonly made without any reference to these substances, and when these exchanged hands, it was not for other things, but for their own usefulness or beauty, and the pleasure or advantage of possessing them. They were gems, toys, charms, ornaments, trinkets, tokens of friendship, souvenirs, or memorials, but not money.

Before North America was colonized by Europeans, the wild tribes

who, by the way, dwelt chiefly upon the banks of its rivers and lakes, used to make for themselves beads of wood, stained either black or white. These being strung upon threads, were knotted or sewn into necklaces, belts, wallets and other articles of wear or ornament. Others of these beads were wrought of mussel shells and were more highly esteemed on account of their greater beauty, durability and difficulty of fabrication. These beads were called wampum, and the belts made of them were worn by the chiefs and employed to commemorate important events and solemn occasions, as the making of a promise or treaty, or as a token of good will and amity.

When the whites came to understand this, they employed similar tokens of friendship, by making strings of wampum and offering them to the Indians as presents or in trade. The Dutch appear to have employed wampum for these purposes shortly after they settled New York. So early as 1628 Governor Bradford, of Massachusetts, speaks of the "trade of wampum." They were made largely by the whites of New England, who exported them to the Dutch settlements in such number that their value continuously declined, and this caused great inconvenience to the New Netherlanders. In New York or New Netherlands in 1627 wampum was current at 5 shillings the fathom; in 1641 unpolished or unstrung wampum went by law at 5 to 6 to the stiver; polished, 4 to the stiver; in 1650 (May) 8 white or 4 black unstrung, or 6 white and 3 black strung, went to the stiver. In September, 1650, "poor" wampum was limited in legal tender to 12 guilders; "half and half" to 24 guilders; "two-thirds" good, to 50 guilders. In 1657, owing to the great abundance of wampum and the consequent rise of prices (in wampum) they were demonetized in the New Netherlands by tale and ordered to be paid by measure. For odd amounts each white wampum was to pass for one-eighth of a stiver and each black one for one-fourth. But this law seems to have been repealed. In 1657 a stiver was worth 6 to 8 white, or 3 to 4 black wampum. Beaver skins were current at 8 guilders in wampum. In 1658, though the wampum maintained their previous value in stivers, beaver skins rose to double, or 16 guilders in wampum. In 1659 wampum were current at 16 to 24 white, or 8 to 12 black, per stiver, while beaver skins rose to 20 and even 24 guilders in wampum. The Dutch Court of Directors now declared that wampum were refused by all the Indian tribes except those of New England. In 1693 the ferryage from New York to Brooklyn was 8 stivers in wampum, or two "pence" (stivers) in silver. At this period the New England "pine-tree" coins were common, and as they acceptably supplanted

wampum for small change, the latter gradually fell into disfavour. However, they continued to be used for many years afterwards.

The typical and commemorative character of wampum, as used by the Indians before the whites instituted them for money, is shown by several examples. Thus, in the early days of Philadelphia, a citizen of that town gave an Indian a string of wampum with the words: "I am your friend and will serve you to the utmost of my power." Forty years after, the Indian returned the string with these words: "Brother, you gave me this string of wampum, saying, 'I am your friend and will serve you to the utmost of my power.' I am now aged, infirm and poor; do now as you promised," and we are told that the white man honourably kept his word.

Thus also, in 1682, a belt 26 by nine inches in size, consisting of 18 strings of wampum, was given by the Indians of Pennsylvania to William Penn, as a token of amity.

In 1722 Sir William Keith, upon the making of a treaty with the Five Nations at Conestoga, presented them with two belts of wampum, accompanied by words expressive of the commemorative character of the gift. In 1758 Frederick Christian Post, being sent by Governor Denny, of Pennsylvania, to make a treaty with the Alleghany Indians, and knowing their customs, deemed it expedient to present them with two peace-belts of wampum, upon one of which the beads of wampum were so arranged by colours as to represent the delivery of a peace-belt, while the other belt was delivered with these words: "By this belt I make a road (free pass) for you, and invite you to come to Philadelphia," etc.

At the Cincinnati meeting of the American Association for the Advancement of Science, in August, 1881, Mr. Horatio Hale, of Clinton, Ontario, Canada, read a paper on Hiawatha and the Iroquois Confederation, in which he traced the real history of this "law-giver of the stone age," entirely from the wampum belt which he handled, than which there could scarcely be a stronger proof that among the Indians wampum were used for commemorative purposes and not as money, until the whites gave them this character.

Speaking generally of the typical character of wampum, it is said that: "The brown or deep violet, called 'black' by the Indians, always means something of severe or doubtful import, but white is the colour of peace." Thus, if a string or belt of wampum is intended to confirm a warning against evil or an earnest reproof, it is delivered in black. When a nation is called upon to go to war or war declared against it, the belt is black, or marked with red, called

by them the colour of blood, having in the middle the figure of a hatchet in white wampum.¹

Out of these uses of wampum there soon grew another. From peace offerings and presents in trade, they came to be employed as a sort of money, which the whites paid to the Indians for game and peltries. As little by little the arts of civilized life were unfolded to them by their conquerors and tutors, wampum were employed amongst the Indians themselves to conduct the few and simple exchanges that now sprang up amongst them.

At that time wampum, though made chiefly by the Yankees and the Dutch, who had probably already made similar beads for the African trade² were also made by the Indians, chiefly by the Pequots and Narragansetts. Their ready acceptance by the Indians for peltries, coupled with the scarcity of coins in the colonies, next led to wampum being used amongst the whites themselves for money, just as at another time they used musket balls for a like purpose. They were legal tender to a limited extent, generally about five shillings, and continued in circulation until about the middle of the 18th century, when the savages, having become satiated with them and their manufacture having exceeded the demand for them, they accumulated, became redundant and fell so low in value as to become practically worthless.

The following table shows the value of wampum in the money of the New England colonies from time to time: Massachusetts, 1628, whites, 6 a penny; one fathom, 5 shillings; 1637, 6 to 12 a penny; 1640, whites, 4 a penny; blacks, 2 a penny; 1641, 6 to 10 a penny; 1648, all payable wampum to be strung; 1649, wampum refused for "rates" or taxes; 1649, wampum refused by colonial treasurer; 1650, whites, 8 a penny; blacks, 4 a penny; legal tender up to 40 shillings; 1661, the act of 1650 repealed; 1655, whites, 6 a penny; 1704, wampum still in use as small change; 1755 to 1775, wampum, 6 a penny. Connecticut, 1640, whites, 6 a penny; blacks, 4 a penny; 1645, whites, 6 a penny; blacks, 3 a penny. Rhode Island, 1673, whites, 6 a penny, blacks, 3 a penny.

There are many authors who regard wampum as having been used

¹ Wampum is an Iroquois word signifying a mussel. Among the whites it was commonly written in the plural. "Contributions to American History," pp. 215-229.

² The borjooks, or beads, used as small change in Abyssinia, resemble in use that given to wampum by the whites of America. Kelly's "Cambist," vol. i, p. 1. Similar beads with a similar use, called *sofi*, are still employed by the venatic and semi-agricultural tribes of Africa. Stanley's "Through the Dark Continent."

as money among the Indians previous to the arrival of the whites, and who suppose that the latter learned this use of them from the former, but such is not the conclusion to which my reading has led. Moreover, it is difficult to believe that venatic tribes should have found it necessary to use money. They had nothing to exchange. Each man made his own garments, his own weapons, his own tent and his own utensils. They rarely encountered other Indians (unless they were relatives or clansmen), except to fight them. A few tribes cultivated a scanty growth of corn, but for the most part the Indians of North America were wanderers and savages, who lived on the spoils of each other and the products of the chase.

Another proof that in employing money the Indians imitated and followed the whites, is derived from the instance of Pontiac's money. Pontiac, chief of the Algonquins, while besieging the English in Detroit, in October, 1763, issued "notes" for the purchase of the supplies needed for his forces. These consisted of pieces of birch bark bearing the figure of the thing he desired to purchase with them and the device of an otter, which he had adopted as his "totem," or hieroglyphic signature. These notes, it is stated, were promissory and were all paid and withdrawn.³

In this case it is very evident that the Indians imitated the whites, and I am strongly of the opinion that this will be found to have been the case with wampum.⁴

According to a statement recently made by the Curator of the San Francisco Golden Gate Park Museum, wampum are still made and used among themselves by the Pomo Indians of Potter Valley, California. The shells after being ground, polished, coloured and drilled with holes, are valued at one cent to one dollar each.

Among the earliest moneys employed in British America were the copper coins struck in England in 1612, and sent for circulation to Somers Islands, better known as the Bermudas. A few of these coins found their way into the circulation of New England; but the main dependence of the colonies for a circulating medium, until paper money was adopted, was "country pay" for large sums and wampum for small change.

³ Quackenboss' History of the United States, 1861, p. 183. Appleton's Cyclopaedia, first edition, article "Pontiac."

⁴ Among the authorities consulted were Felt, "History Currency;" Bronson, "Connecticut Currency;" Palfrey, 1, 611; Tompson, 1, 85; Elliott, 1, 137; Norwood on "Wampum," Albany, 1880; O'Callaghan's "Laws and Ordinances of New Netherlands," Albany, 1868; and the New York Collection of Historical Manuscripts, which last contains the ordinances of the Director General and Council of New Netherlands.

CHAPTER XIII.

PINE TREE, COLONIAL AND BANK ISSUES.

THE three principal kinds of money which compose the circulation of the United States to-day were typified by the three sorts of money which formed the circulation of the British Colonies two centuries ago. The first were the Pine Tree coins authorized by the Colony of Massachusetts, but issued, or withdrawn, as our coins are to this day, at the pleasure of private individuals. For this privilege the issuers of the Pine Tree coins paid a seigniorage of five per cent. ; whilst the issuers of the coins of the present day pay nothing either for their fabrication, or for the stamp and legal-tender function conferred upon them by the government, or for the privilege of issuance, export, or withdrawal from the circulation. This is a mistake of policy. "Free coinage" means unlimited, not necessarily gratuitous, coinage; and there is no good reason why the owners of bullion who desire to have it coined should not defray at least the cost of its fabrication into money. The experience of the Pine Tree coins, all of which were eventually melted down within the country, or else exported and melted down elsewhere, proves that a seigniorage of five per cent., though it may discourage, will not prevent, the melting or export of coins.

The second sort of money consisted of the Colonial bills, which, in the respect that they were issued by government, resemble our present greenbacks. But unlike the greenbacks, they were issued by a dozen rival governments without any agreement between them as to the whole quantity to be issued; the issuing governments, that is to say, the Colonies, acted in this matter without authority from the Crown; they increased their issues from time to time without regard to policy, or prudence; they gave currency to one another's issues and thus still more imprudently increased the circulation in each Colony by itself; and finally the issues were so systematically and successfully counterfeited that it was impossible to distinguish the genuine from the counterfeit notes, or to save the former from discredit.

The third sort of money consisted of promissory notes issued by private banks, or the individuals who controlled them. It has been disputed that bank issues formed any part of the American circulation previous to the establishment of the Bank of North America in 1781, but while it must be admitted that bank notes formed no considerable portion of the circulation, it cannot be denied that they formed some portion of it. The leather notes of San Domingo and Puerto Rico in 1586 mentioned by Lefroy,¹ may be left out of view as not pertaining to the British American Colonies. But the various other private (bank) issues alluded to elsewhere in this work cannot be excluded from any comprehensive view of North American money.

The reason why the early bank issues of the British American Colonies were never important possesses a significance that entitles these issues to profound consideration. That reason was the unwillingness of the Colonial governments to share with private individuals the prerogative of money. The Colonists, in all their acts and resolutions concerning the subject of money, proved that they were well aware of its great influence upon, not merely the fortunes, but also upon the liberties, of the people. They well knew that to issue money was a necessary function of sovereignty; and when they resolved to issue it themselves they did so in a manner and to an extent that evinced their determination both to defy the authority of the Crown and to crush the incipient banks of issue which had been incorporated under its patronage.

Americans of the present degenerate age may imagine that their ancestors, because they were obliged at times to use "country pay" for money, were ignorant of its higher forms and still more ignorant of its principles and the relation of monetary systems to politics. But if so, they are mistaken. As shown in another chapter, the principles laid down in the great *Mixt Moneys* case of 1604 were well understood by the Colonists. The failure of the various private banks which preceded the Bank of North America was due as much or more to the hostility of the Colonial governments, than to any other cause. The American people were never favourable to private banks of issue, and they have only tolerated them upon such occasions as when—owing to a contraction of the coinage or of the government notes—they were obliged to accept a dangerous relief rather than none at all.

¹ J. H. Lefroy, of Bermuda, in the *Numismatic Chronicle*, 1867.

CHAPTER XIV.

CONTINENTAL MONEY.

Significance of the American Revolution—Its inception and progress worthy of a profound study—It was demanded by the physical growth of the Colonies and their need of institutions favourable to further development—Foremost among these was a monetary system independent of the Mercantile system and the social circumstances of Europe—Proof of this view furnished by the monetary contentions between the Colonies and Crown, the contraction of 1750 and the stamp act of 1774—The first legislation in Massachusetts, where the outbreak began, was to establish a paper money system in defiance of the Crown—This was likewise among the first acts of the Continental Congress at Philadelphia—Character and history of the Continental bills—They were not legal-tenders—Originally Congress had no legal power to create money—The bills were issued in express defiance of Royal injunction—They were co-ordinated with the Colonial bills and various other moneys—No specific limit to the whole quantity of money—The emissions of paper were sometimes secret—They were excessive almost beyond belief—They were counterfeited on a gigantic scale—History of the Continental bills during each of the six years of their career—Year 1775, emissions of bills by Congress and the several Colonies—Some conditions of their emission—Estimated population of the Colonies—Currency of the Colonies at the close of 1775—Currency at the close of 1776—Rise of prices—Flush times—Maximum laws—Counterfeiting—Year 1777, Beginning of the depreciation of the bills of credit—Counterfeiting—Years from 1778 to 1781.

FEW events have occurred in the history of mankind of more general importance than the American Revolution. It was not merely the assertion of independent sovereignty by a few remote and obscure colonies. It was the establishment of an order of society which had been substantially forgotten for eighteen centuries; it was the separation of Church and State, and the extinction of the feudal system, and that too among a people with such natural advantages and opportunities of growth and progress, that this new order of affairs was likely to create a new empire, greater than that of all Europe. This revolution possesses such great historic interest that it demands a rigorous impartiality in tracing its inception and progress.

In the execution of this task historians have hitherto paid too little attention to the significant circumstance, adverted to in a previous work,¹ that the New England Colonies, in which the revolution orig-

¹ Hist. Prec. Metals.

inated, were of an agricultural character, and for this reason, as well as from the political antecedents of the colonists and the expanse and fertility of the lands they occupied, they possessed a strong tendency to rapidly increase in numbers and productive resources. Such a community demanded the establishment of institutes favourable to its rapid development and the removal of such institutes as threatened to retard or prevent it. Foremost among the latter was the institute of Money imposed upon it by the Mercantile system of Great Britain. This system encouraged the import and discouraged the export of the precious metals from England. Therefore, unless the North American Colonies could produce these metals from their own soil, which happily for posterity they could not, they had to be contented with such money as the Crown chose to provide them with.

It is evident that with money, the supplies of which were subject to the power of a distant sovereign and an apathetic ministry, the orderly development of the Colonies was impossible, and hence followed those efforts to establish at first a silver coinage and afterwards a paper system of their own, which led to the contentions between them and the Crown that distinguished the latter half of the 17th and first half of the 18th century. The bitterness arising from this source was enhanced by the Contraction of 1750, and the prostration of industry to which it led. When in 1774 the Act was promulgated which required a stamp to be placed upon every instrument of commerce, and thus threatened to suppress or defeat that restoration of the paper money system which was at that time being sought, the bitterness of the Colonists grew to phrenzy and resulted in those acts of resistance to the Crown which have been dignified by the names of the "battles" of Lexington and Concord.

Almost the first act of the Massachusetts and the Continental revolutionary assemblies was the emission of paper money in the teeth of the Royal prerogative, and this was done while yet the Colonies had no fixed determination of separating from the mother country. Indeed, barring Lexington and Concord, which were mere skirmishes to protect some trumpery stores, the emission of paper money was the first act of open resistance and defiance which the American Colonies offered to the Crown. On the 1st of May, 1775, less than a fortnight after the opening skirmishes of the Revolution, the Committee of Safety appointed by the Provincial Congress passed a resolution, in defiance of the lately re-established prerogative of the Crown, providing that the "paper currencies" of the neighbouring Colonies "be paid and received within this

Colony." The following are the words of this important resolution:

"*Whereas*, many of our brethren of the Colonies of Connecticut and Rhode Island are now with us, to assist us in this day of public and general distress, in which we are all deeply concerned; and whereas our brethren of said Colonies have brought with them some of the paper currencies of their respective Colonies, which have not, of late, had a currency with us, and for want of which our common interests may greatly suffer, *Resolved*, that said paper currencies shall, from and after the date hereof, be paid and received within this Colony, in all payments, to all intents and purposes, in the same proportion to silver, as the same are paid and received within the respective Colonies by which the same have been issued."

Two days afterwards, to wit on the 3rd of May, the Provincial Congress empowered the Treasurer of Massachusetts to raise £100,000 (Colonial) by issuing six per cent interest-bearing bills of credit to that amount, payable June 1, 1777. No bill was to be of a less denomination than £4; and, as they desired the other Colonies to accord them "currency," it is to be presumed that they were made legal tenders in Massachusetts. Eight days later, to wit on the 11th of May, Massachusetts asked the Revolutionary, or "Continental" Congress which had assembled at Philadelphia on the previous day, to endorse for her, the sum of £100,000 in bills of credit, which she proposed to issue, so that she might be able the better to obtain circulation for them in the other Colonies. Pending the consideration of this request by Congress, Massachusetts on the 20th May, 1775, ordered the emission of £26,000 one-year interest-bearing legal-tender bills of credit, chiefly of small denominations. The following is a copy of one of these notes:

"COLONY OF THE MASSACHUSETTS BAY.

No.....

May 25, 1775.

The possessor of this note shall be entitled to receive out of the public treasury of this Colony the sum of twenty shillings, lawful money, on the twenty-fifth day of May, A. D. 1776, with interest, at the rate of six per cent per annum. and this note shall be received in all payments at the Treasury, at any time after the date hereof, for the principal sum, without interest, if so paid before the 25th day of May 1776, which notes shall be received in all payments in this Colony, and no discount or abatement shall be made thereon, in any payment, trade, or exchange whatsoever."

Turning from the acts of Massachusetts to those of the Congress of all the Colonies, we find that the establishment of an independent monetary system was among the first measures they adopted. This immortal body met May 10, 1775, and on June 22 it resolved to

emit \$2,000,000 in bills of credit, for whose redemption the faith of the "United Colonies" was pledged.

The following is a copy of one of the bills emitted under this resolution:

"CONTINENTAL BILL OF CREDIT.

No. 10 Ten Dollars.

This bill entitles the Bearer to receive Ten Spanish milled Dollars or the value thereof in gold or silver, according to the resolutions of the Congress held at Philadelphia, on the 10th day of May, 1775."

Says Jefferson: "Before the 19th of April, 1775," the day succeeding the Battle of Lexington, "I never had heard a whisper of a disposition to separate from Great Britain. The Colonies had not yet cut asunder the ties of their allegiance to the Crown. The Continental Congress had sent a petition to the King denying any intention of separation from England." But, although the Colonies were as yet uncertain of their course with respect to separation, there was no uncertainty with regard to their monetary system. This they had determined should be independent of the Crown and this determination they had expressed in overt acts that had long marked them as disaffected rebels and were now to mark them as outlaws. Lexington and Concord were trivial acts of resistance which chiefly concerned those who took part in them and which might have been forgiven; but the creation and circulation of bills of credit by revolutionary assemblies in Massachusetts and Philadelphia, were the acts of a whole people and coming as they did upon the heels of the strenuous efforts made by the Crown to suppress paper money in America, they constituted acts of defiance so contemptuous and insulting to the Crown that forgiveness was thereafter impossible. After these acts there was but one course for the Crown to pursue and that was, if possible, to suppress and punish these acts of rebellion. There was but one course for the Colonies; to stand by their monetary system. Thus the bills of credit of this æra, which ignorance and prejudice have attempted to belittle into the mere instruments of a reckless financial policy, were really the standards of the revolution. They were more than this: they were the Revolution itself!

There are several circumstances in connection with the Continental bills which are worthy of observation in this place:

I.—They were money only to a partial extent. They were not legal-tenders throughout the whole country. The Colonies did not clothe the Continental Congress with power over money, but retained it themselves. One by one and usually in return for an endorsement

of their own notes (*i. e.*, so-called "Continental bills" allotted and given to or issued by them, and endorsed by Congress) the States made the Continental bills a legal-tender within their respective jurisdictions, sometimes at par with their own notes, sometimes at a great discount below them. Others of the states, like Massachusetts, limited the legal-tender function of the Continental bills to one dollar, or, like Virginia, practically destroyed it altogether, by boundless emissions of their own notes, which were made co-ordinate with them. The progress of monetization was so slow that so late as January 14th, 1777, Congress felt constrained to appeal to the States to fully accord the function of legal-tender to its bills.

II.—The Continental Congress had no legal power to create money and no physical power to maintain or enforce its circulation after it had been created. It could not redeem the notes in taxes. Congress was a revolutionary body liable to be suppressed at any moment. It was without any legal authority, either from Great Britain or from its constituent States, to create money. This power was first granted by the Articles of Confederation, which although they were provisionally agreed upon in 1777 were not ratified by all the states until 1781, by which time the Continental bill system was superseded by coins. The circumstances of Congress were such, (for example, it had no power to levy taxes), that it could not refrain from continuing to emit bills. Hence, it could make no positive limit to the emissions, and hence could not maintain the system. It had no courts or police, nor other physical means to enforce the acceptance and circulation of the bills, nor to prevent or punish counterfeiting.

Perhaps in all history there never was a body at once so powerful and so helpless as this one. It exercised all the powers of national sovereignty, and yet never collected a dollar of taxes in its own right. It accredited its ministers to foreign countries, and received ambassadors in return; but would have trembled to appoint a tax collector in Rhode Island or Delaware. It created armies, emitted money, made foreign loans, yet had no certain resources upon which to base any of these acts. In a word, it was at once a sovereign and a mendicant.

III.—For more than three-fourths of a century the Colonies had been admonished that in emitting bills of credit they had usurped a royal prerogative, and for more than a quarter of a century, these same Colonies had been made the object of most severe measures designed to repress this practice and stop the circulation of the bills. To encourage the currency of Continental bills was therefore to incur the certain displeasure of the Crown.

IV.—The lack of monetary authority on the part of Congress reduced its emissions to the rank of those made by the various Colonies. As during the Revolution all these emissions were more or less co-ordinate, the position of the Continental bills was that of one series out of twelve series of paper emissions, all of them branded with disloyalty and rebellion and all, at one time or another, and finally all at one time, legal-tenders.

V.—After the Continental bills had declined in value greatly below coins of the same denominations, Congress fixed a limit to their emission; but there were no limits fixed to the emissions of the States, and consequently none to that of the whole mass of paper bills.

VI.—There are evidences that the necessities of Congress compelled it to make frequent emissions of bills of credit in secret; so that, although in fact the emissions were within the limits of their authority, they were not within those of their implied statements to the country. Thus, although the various authorizations to emit bills added up \$242,052,780, it was affirmed that the actual emissions outstanding at any one time were only \$200,000,000; whereas in point of fact, they amounted to over \$240,000,000. The emissions were so redundant that at one period during the war the mass of paper dollars including the State issues and other paper notes in circulation amounted to the almost incredible sum of five hundred millions.

VII.—Colossal as this sum was, the sum of counterfeits was probably still greater. Of this fact some evidences will be furnished during the course of this chapter. In short, the emissions of Revolutionary bills formed a measure of value without any known length, breadth, or depth. The six years during which the Continental bills passed as money will now be treated in their order.

Year 1775.—On June 28th, the Provincial Congress of Massachusetts, in the hope that the other colonies would give currency to their notes, made those of the other colonies current, and resolved that whoever should receive them at less than par “shall be deemed an enemy to his country.” On July 6th, 1775, Massachusetts, through her Committee of Safety, resolved to issue £100,000 in bills from 1 to 100 shillings each. These bills were constituted a legal-tender for taxes within the Colony, and ran as follows:

“COLONY OF THE MASSACHUSETTS BAY. July 18th, 1775. No. 109.

The possessor of this bill shall be paid by the Treasurer of this colony two shillings and sixpence, lawful money, by the 18th day of July, 1777, and it shall be received in all payments at the Treasury at all times. By order of CONGRESS, A. D., B. E., Committee.”

On July 27th, 1775, the Continental Congress authorized a second emission of bills of credit similar in tenor to those of June 22nd, but limited in amount to \$1,000,000. It was intended that the bills of these two emissions should be "sunk," or redeemed with taxes, to be levied by the various Colonies. But this intention was not enforced by simultaneous action or legislation on the part of the Colonies, and thus the emission of bills was unaccompanied by any definite provision to retire them. These \$3,000,000 were emitted not so much to meet the requirements of the nascent government as to be divided and appropriated amongst the various Colonies on the basis of population. This division was made as follows:

Emissions of Continental Bills authorized down to July 27th, 1775.

Colonies.	Population in 1775.	Proportion of Continental Bills in 1775.	Population in 1783.
Virginia,	300,000	\$496,278	400,000
Massachusetts Bay,	352,000	434,244	350,000
Pennsylvania,	341,000	372,210	320,000
Maryland,	174,000	310,174	220,700
Connecticut,	202,000	248,139	206,000
New York,	238,000	248,139	200,000
North Carolina,	181,000	248,139	170,000
South Carolina,	93,000	248,139	150,000
New Jersey,	138,000	161,291	130,000
New Hampshire,	200,000	124,069	82,200
Rhode Island,	58,000	71,959	50,400
Delaware,	37,000	37,219	35,000
Georgia,	27,000		25,000
Totals,	2,341,000	\$3,000,000	2,339,300

The division of Continental bills made in 1775 was conducted upon the basis of the estimated total population of each Colony, including negroes and mulattos, and was intended to be rectified when the "list" or census of each Colony was obtained. Such information was, however, not received until several years later, about the year 1783, when the "lists" were made up so as to include only two-fifths of the slaves and no Indians. It is from these lists that the foregoing tables of population are derived. The total number of slaves was about 500,000. In 1775, Georgia was occupied by the British forces and was not included in the appropriation of Continental bills.

In addition to these emissions of Continental bills, the various Colonies emitted bills of credit of their own. Thus, besides the £126,000 authorized to be emitted by the Massachusetts legislature in May and £1,200,000 more in July and August, many of the other Colonies emitted bills of credit, of which the following is a partial account:

Colonial Bills of Credit emitted in 1775.

Massachusetts, £326,000, say,	. . . . .	\$1,087,000
Rhode Island,	. . . . .	200,000
Connecticut, £150,000, say,	. . . . .	500,000
New York,	. . . . .	112,500
Pennsylvania,	. . . . .	420,000
Delaware,	. . . . .	80,000
Maryland,	. . . . .	535,111
Virginia,	. . . . .	875,000
South Carolina,	. . . . .	?
		<hr/>
Partial total,	. . . . .	\$3,809,611

Neither the Colonial nor the Continental bills were general legal-tenders throughout the country. The former were sometimes only legal-tenders to and from the state and only within its jurisdiction, sometimes full legal-tenders within the state and sometimes full legal-tenders within several states, according as the various state legislatures admitted them to currency. The latter were legal-tenders sometimes in a few, at others in all, and at others again in only some of the states, according to local legislation. Any treatment of the whole mass as so much money of equal efficacy and value is therefore erroneous. On November 29th, 1775, the Continental Congress authorized the emission of \$3,000,000 more in bills of credit to be divided up and appropriated amongst the states. At the close of 1775 the condition of the currency was approximately as follows:

Estimated Currency of British America at the close of 1775.

Continental bills of credit,	. . . . .	\$6,000,000
Colonial " " " say,	. . . . .	3,809,611
Coins; Lord Sheffield estimated £1,900,-		
000, say,	. . . . .	9,190,389
		<hr/>
Partial total,	. . . . .	\$19,000,000

Year 1776.—Thus far, the Revolutionary bills of credit had circulated at par and they were destined to do so for another whole year to come. Nevertheless, the Continental Congress on January 11th, 1776, deemed it necessary to declare that whosoever should refuse to accept them, or discouraged their circulation, should be treated as a public enemy. As Congress had no power to execute this threat it simply amounted to an exhortation to the patriotic to accord circulation to the bills, whether the laws of the several Colonies encouraged such circulation, or not. On January 5th, 1776, Congress authorized the emis-

sion of \$10,000 in bills of credit; on February 17th, it authorized \$4,000,000; on May 9th and 22nd, it authorized the emission of \$5,000,000 each time; on July 22nd and August 13th, \$5,000,000 altogether; on November 2nd, \$500,000; and on November 2nd and December 28th, \$5,000,000 altogether; total for the year, \$19,510,000. Besides these emissions Congress, on October 3rd, 1776, authorized a loan of \$5,000,000 for which certificates bearing interest at four per cent. per annum were given. It was expected that these certificates would absorb the bills; on the contrary, they circulated as money, and thus augmented the quantity of bills. Meanwhile, the several Colonies continued to add to their emissions of bills. The following is a partial account of them:

Colonial Bills of Credit emitted in 1776.

Massachusetts, £100,000 in interest-bearing Treasury notes, say,	\$333,333
Rhode Island,	300,000
Connecticut,	366,300
New York,	637,500
New Jersey,	133,000
Pennsylvania,	227,000
Maryland,	415,111
Virginia,	1,500,000
South Carolina,	?
	<hr/>
Partial total,	\$3,912,244

At the close of 1776 the condition of the currency was approximately as follows:

Estimated Currency of British America at the close of 1776.

Continental bills of credit,	\$25,500,000
Colonial, say, \$3,809,611 plus \$3,912,244.	7,721,855
Continental loan certificates,	5,000,000
Private bank notes,	?
Coins, let us say about	6,778,145
Counterfeits,	?
	<hr/>
Total, say,	\$45,000,000

This augmentation of the currency occasioned a rise of prices which afforded great stimulus to trade. "Flush times" are reported in Connecticut, Massachusetts, New York, Virginia, and several others of the states. Unfortunately, the ignorance of the period in relation to the influence of money found expression in "maximum" laws, and laws of this character were passed in Connecticut and elsewhere.

Down to this date the Continental bills and therefore necessarily the Colonial bills, had circulated on a par with coins. They were hereafter, chiefly through the influence of counterfeiting, unfriendly legislation by the several states, and excessive emissions, destined to rapidly fall in value.

Year 1777.—In January, 1777, the Continental notes fell to a discount of 5 per cent. in coins. Congress, to avert their further depreciation, declared January 14, 1777, that any person giving or taking them at less than their par value in coins was an enemy to liberty, etc., and recommended the several states to make the notes legal-tenders, a measure which had been adopted thus far only in some of the states. The declaration of Congress having no legal footing and being unsupported by physical force, was without effect. The recommendation to the states could only have validity so fast as it was adopted into their codes of laws.

Pending the operation of these feeble measures, the British government entered upon a course of action which at a single stroke suddenly and greatly impaired the value of the bills of credit and doomed them to speedy destruction. Fortunately for the cause of liberty, this policy took time enough in its operation to enable the states during the interval to achieve their independence by force of arms. I allude to the adoption of Counterfeiting as a military weapon. Some evidences of this action on the part of the royal government will now be adduced. The existence of counterfeits on a large scale probably dates from the year 1776, but little evidence of it is found previous to 1777. The presence of counterfeit notes induced the Massachusetts House of Representatives on May 3, 1777, to recommend that especial exertions should be made to obtain water-marked paper upon which to print their bills, and they gave authority to officers of justice to enter and search any house suspected of containing counterfeiters' implements. On June 25th, 1777, a delegation was appointed by the state of Massachusetts to confer with other delegations from New England and from New York, at Springfield. Among the objects of this Convention was that of devising means to arrest the growth of counterfeiting. The Convention met July 30, 1777. On July 3, 1777, it was recorded in the Secret Journal of Congress that a large amount of counterfeit Continental bills had been fabricated in England and brought to America in British men-of-war operating in the Delaware; and that the bills had been put into circulation. Regarding "immense" quantities of counterfeit Continental bills fabricated in New York and elsewhere under British influence,

Schuckers says: "In a confidential letter to Lord George Germaine, about this time (1781) General Clinton observed, 'that the experiments suggested by your lordships have been tried; no assistance that could be drawn from the power of gold or the arts of *counterfeiting* have been left untried; but still the currency, like the widow's cruise of oil, has not failed.'" Says Henry Phillips, Jr.: "It is a fact too well authenticated to admit of dispute that Gen. Howe aided the making and uttering of counterfeit Continental bills. In the same newspaper, in New York, in which the British official documents were printed, there were also printed advertisements proposing to supply counterfeit money to persons going into other Colonies, so nearly and exactly executed that no risk attended their circulation. Persons accompanying a British flag of truce were known to have made use of the opportunity for circulating the counterfeits; and emissaries from New York endeavoured to obtain from the mills paper similar to that used by Congress for its emissions."

On October 13th, 1777, the state of Massachusetts, rather unpatriotically it must be stated, passed a law limiting the legal-tender of Continental bills—bills which, it will be remembered, were awarded to that state by the general Congress—to six shillings, or \$1, in any one payment. It moreover forbade the circulation of the bills of any of the other states after December 1st, 1777. At this time Congress was "with an earnestness almost pathetic," appealing to the state legislatures to refrain from local issues. Massachusetts had borrowed on time-notes £950,400 and issued £500,042 in bills of credit since the outbreak of the Revolution. Besides these bills there was a large amount of Continental notes in circulation within the state.

Year 1778.—The Articles of Confederation between the states were agreed upon Nov. 15th, 1777, though they were not fully ratified until July 9th, 1778. This instrument conferred upon the Confederation power to regulate the alloy and value (denomination) of coins, whether struck by the Confederacy or the states, to borrow money and to emit bills of credit, and it assumed (Art. XI) the obligation to pay "all bills of credit emitted, moneys borrowed and debts contracted by and under the authority of Congress before the assembling of the United States." But the nascent empire had as yet no taxing power and no police to enforce its laws. These elements of political life were jealously retained by the states, who only granted them reluctantly and at a later period. These provisions illustrate in another way the halting opinions on money which were entertained at this period. To accord power to the states to emit coins or issue

paper money, was to permit the general measure of value to be augmented or diminished at the pleasure of the individual states. It was as though bushels, yards or gallons were to be of such dimensions as the various states chose to make them—indeed, as they did make them, and to some extent still make them. Such provisions clearly prove the weakness of the General Government and its inability to control its constituent members. The monetary emissions of the Government were bound to share this weakness and so might prove to be altogether invalid. “There was no bond sufficiently energetic between the members of our Union,” says Felt, and especially true was this of its power over the currency. That such currency should have fallen in value is therefore no matter for astonishment.

On December 3rd, 1777, information was promulgated which revealed the existence of various Tory associations formed to put illicit paper notes into circulation with the double view of making money out of the operation and of depreciating the Continental bills by adding to the redundancy of the whole mass of paper. On December 19th, 1777, a great mass of counterfeit Continental notes fabricated under the orders of the British government were brought into New York by the fleet under Sir William Howe and put into circulation during the following year.

Year 1779.—The Continental bills were now so largely and successfully counterfeited that entire issues had to be recalled in order to save the system from immediate collapse. On January 2nd, 1779, Congress after stating that these bills “had been extensively counterfeited and particularly of late in New York, and spread through the country, enhancing the price of provisions and injuring our currency,” ordered that thereafter that the entire issues of May 20th, 1777, and April 11th, 1778, amounting together to \$10,000,000, shall cease to pass current; but directed the states to receive bills of these issues for taxes, and to pay them into the Continental treasury. Massachusetts alone paid in \$800,000 of these bills, and it is presumed that of the whole amount thus retired by the Continental authorities, a large proportion was counterfeit.

On February 20th, 1779, Massachusetts addressed a circular letter to the Southern states renewing an application which she had previously made for food, particularly flour and grain, of which she declared herself destitute, and she called upon the Congress of the Confederacy to give her application the benefit of its endorsement. Seven months later, to wit, on the 23d September, 1779, she laid an embargo upon all exportations out of the state in order that the other

states might not be able to purchase provisions and other commodities in Massachusetts with Continental bills, the legal tender of which, it will be remembered, she had already limited to \$1 in any one payment.

On September 1st, 1779, Congress for the first time set a definite limit to the emissions of its bills of credit outstanding at any one time. It declared that under no circumstances should this limit exceed \$200,000,000; and to its great credit be it recorded, this limit was never exceeded. Nearly a century later, the American Congress made a similar enactment. On June 30th, 1864, it declared that the emission of treasury notes, or "greenbacks," should not exceed \$400,000,000, and this limit was never exceeded. On both occasions, however, other things besides government notes were permitted to circulate co-ordinately with them as money; and the consequence was that the whole mass of money became so swollen and redundant as to occasion the depreciation of all of it, including the government notes. In the Revolutionary period this redundancy was occasioned chiefly by the Colonial bills and counterfeits; in that of the Civil War it is attributable to private or so-called "national" bank notes.

Year 1780.—The monetary system of the new Republic presented a curious phenomenon at this date. The Continental notes had a general currency throughout all the states, except where, as in Massachusetts, their currency was curtailed by local enactment. At the outset of the Revolution the Colonies had accorded currency to one another's emissions of bills of credit; but at subsequent dates this privilege was gradually restricted until the notes ceased to obtain currency outside of the Colony or state of their emission. And, since each Colony had emitted bills of credit without regard to the emissions of the other Colonies, it followed that in some Colonies these emissions were far greater and more redundant than in others. Hence a different scale or level of prices prevailed in each one. For example, prices were much lower in Boston than in Philadelphia. When the Continental emissions were augmented so greatly as to form the principal portion of the currency in each state, a tendency towards the equalization of prices betrayed itself, which the states with the least redundant Colonial currencies, hastened to counter-vail. This was sought to be accomplished by means of a device similar to that adopted by Massachusetts in September, 1777, namely an inland embargo. Such embargoes were enacted in New York, Connecticut, Rhode Island and New Hampshire. On January 14th, 1780,

Massachusetts, finding that the object with which her embargo had been enacted was defeated, and having been urged by Congress to repeal it, addressed a letter to the states above named, offering to repeal her embargo act, if they would agree to do the same.

On March 18th, 1780, Congress, alarmed at the great and rapid depreciations of its bills, which now stood at 40 for 1 in coin, proposed to retire them by means of taxes to be levied by the states, at the rate of \$15,000,000 per month. This would have retired the whole emission in the course of a little more than a year. They were to be received at the rate of 40 for 1 of coins; a feature of the project that had no real significance; for whether received at this rate or any other, the choice could have made no further difference than to have rendered necessary an alteration of the rate of taxation. The act contemplated would have been the same whether the bills were received at 40 for 1 or at 1 for 1. That act was the demonetization, retirement and destruction of the entire emissions of Continental bills in the course of little more than a year. It was the suggestion of a madman. Meanwhile a new emission of bills was to be made, which it was hoped would circulate at par with coins. These bills were to be issued to the extent of one-twentieth part of the nominal sum of the old emissions brought in to the state treasuries to be destroyed, and were to be signed by the state authorities and endorsed by the United States. They were to bear interest at five per cent. per annum and were to be redeemable in coins in six years. They were not made legal-tenders. The following was the form:

“STATE OF MASSACHUSETTS BAY.

No. 7928.

Eight Dollars.

The possessor of this bill shall be paid eight Spanish milled dollars, by the thirty first day of December, one thousand seven hundred and eighty-six, with interest in like money, at the rate of five per cent per annum, by the State of Massachusetts Bay, according to an act of the Legislature of the said State, of the fifth day of May, 1780. Interest, annually 2s. 4d. 3f.; monthly 2d. 1½f. The United States ensure the payment of the within bill and will draw bills of exchange for the interest annually, if demanded, according to a resolution of Congress, of the 18th of March, 1780.”

It will be observed that in this bill, for the first time, Massachusetts employs the “dollar” instead of the sterling denominations as before. Curiously enough, the interest calculation is made in sterling. The denomination of dollars had been used in New York since 1774. How, with the previous experience in bills of credit, the rev-

olutionary authorities could have expected these bills to circulate at par with coins, is difficult to imagine. They were not legal-tenders; they were issued not in the place of the old emissions withdrawn, but in addition to the old emissions still in circulation, and only *promised* to be withdrawn. They were issued also, in addition to the old Colonial and bank bills, besides the mass of counterfeits of all these emissions which had obtained circulation. The reason why they were not made legal-tenders, is not clear; neither is the reason for deferring their payment for so long a time as six years, unless indeed, it was the difficulty of making the public believe that any earlier payment was possible.

Of the total emission of these New Tenors the states were to have the right to issue six-tenths and the United States four-tenths. On May 5th, 1780, Massachusetts issued under this arrangement £460,000, at the exchangeable rate of 1 for 40 of the Old Continental Tenors; but before the New Tenors could be paid out the Old Tenors had fallen to 75 for 1 of coins in Massachusetts and 120 for 1 in Pennsylvania. It was evident that the Continental bills were about to become worthless. They had been issued and used as money without authority on the part of Congress to make them money; the States had continued to authorize other emissions; the emissions had been excessive; and they had been successfully counterfeited to an immense extent. It is therefore not surprising that the New Tenors failed to answer the purposes intended. Few people would take them. The soldiers had refused the Old Tenors and clamoured for coins, saying that they wanted no paper money of any kind; and coins were actually coming into circulation. "Large quantities came from the French and British forces, some from Havana and other foreign parts and some from prizes captured in the West Indies." They passed freely among the population.

Year 1781.—On January 18th, 1781, the Massachusetts legislature levied a tax partly payable in coins; showing that at this date and at least in Massachusetts, coins were becoming the actual currency of the country. As going to show the extraordinary opinions with reference to the principles of money which prevailed at this date, I here reproduce the views of the Massachusetts legislature on this subject: "The value of money, which is but a representative of property, will ever be regulated by the consent of the common people at large; hence attempts of any legislature to regulate it must prove abortive." Three propositions are here enunciated: 1. That money is a representative of property; 2. That its value is regulated by com-

mon consent; 3. That the legislature, which embodies the common consent, cannot regulate it.

If money is a measure of value as is commonly believed, the first of these propositions is untrue; for no measure can represent property; it merely represents a relation. If the second proposition is right, the third one is evidently wrong; but the second one is not right; for measures, (money being a measure of value) are not regulated by common consent, but by authority. Neither common consent nor legislation can fix the value of money in relation to commodities. This is fixed by their relative supply and demand, over which, only so far as money is concerned, is legislative authority supreme. Another opinion current at the time was that of Pelatiah Webster. This author graduated at Yale in 1746, was ordained for the ministry, and at a late period became a merchant in Philadelphia. At the outbreak of the war he met with considerable losses. Between 1776 and 1790 he printed a number of pamphlets on the currency, which in 1791 were put together and published in a volume of 504 pages with notes. Mr. Webster in his essays lays down the following law of money: "I conceive the value of the currency of any state has a limit, a *ne plus ultra*, beyond which it cannot go, and if the nominal sum is extended beyond that limit, the value will not follow." This is a half-truth of the Metallic School which will be found fully refuted in the author's "Science of Money." The Congressional declaration of 1779 that "paper is the only kind of money that cannot make to itself wings and fly" is attributed to John Jay. This is another half-truth; but, indeed, the times were full of them. The principles of money cannot be condensed into a sentence; and all sententious observations on the subject should be regarded with distrust.

It should be mentioned in this place that the states (other than Massachusetts), which had demonetized the Old Tenor Continental notes had not, as was expected, retired them upon the emission of the New Tenors and that the value of these notes—which it seems were regarded as legal-tenders (see below) differed in the various states; giving rise to financial transactions embarrassing to merchants and detrimental to industry.

On July 5th, 1781, the Legislature of Massachusetts demonetized the Old Tenor Continentals by forbidding them to be presented as legal-tenders at any rate whatever. They were valued at 500 to one. On May 31st, 1781, the New Tenors were three for one, and although placed under the ban of the State Assembly, they permitted, July 8th, 1781, their quota of them to be received at $1\frac{3}{8}$ for 1. Yet

on September 25th, finding that they had fallen to four for one, they demonetized them altogether and forbade them to be received as money. On November 1st, 1781, the Assembly offered to retire them for coins at four for one. It seems that at the time of this rapid depreciation, interest was paid on the face value of these notes in coins; proving that the depreciation was not due to any failure on the part of the state to keep their promises in references to them, but to the great quantity of all the notes in circulation.

On October 19th, 1781, Lord Cornwallis surrendered his forces to the American army before Yorktown, Va., and this event virtually ended the war. Coins were now in general circulation throughout the country. On May 26th, 1781, a bill was passed in Congress to incorporate the Bank of North America with privilege to issue notes. Subscriptions to the stock were completed December 31st, 1781, and on January 7th, 1782, the Bank commenced operations.

Never was a great historical event followed by a more feeble sequel. A nation arises to claim for itself liberty and sovereignty. It gains both of these ends by an immense sacrifice of blood and treasure. Then, when victory is gained and secured, it hands the national credit—that is to say, a national treasure—over to private individuals, to do as they please with it! A similar anti-climax is being urged upon the nation to-day. The Civil War was fought with the bills of credit issued by the general government, after all the private banks in the country had shamefully closed their doors and gone into bankruptcy, (December, 1861). Now that the war is over, these same banks, under new names, are urging Congress to retire the greenbacks and allow them, the bankrupts, to issue their own notes as money in place of the greenbacks which served the nation so well.

That such measures were enacted by Congress a century ago, and that similar measures are entertained by Congress to-day, can only be attributed to the absence of such a body of knowledge on financial subjects as would have enabled the statesmen of that day and as might enable statesmen of the present day, to profit by the experience of the past. The Americans of the Revolution had before them not merely the chimerical Utopias which were dreamed of during the Halcyon Age of Europe, they had the historical examples of Greece and Rome. In all of these states, the main contention from first to last between the aristocratic and popular factions, arose out of and centered in the monetary system; that greatest of all dispensers of equity or inequity. In America there were no such difficul-

ties in the way as those which had beset the great republics of antiquity; no dissonance of races, language or history; no conflicting religions; no constriction of territory; no fear of neighboring interference. The Colonists had practically an entire continent to themselves. They had only to take care that the seed they planted was genuine and uncontaminated. Nature was certain to do the rest. Well, they planted; and now look at the fruit and see what it is that they planted! They planted financial corporations, a rotten seed that Rome had trampled under foot nearly two thousand years before; they planted private money, in which successively both Greece and Rome had found the germs of social decay; and they planted financial exemptions from public burdens, whose offspring has already become a tree so mighty that it casts a threatening shadow over the land. In a word they planted another revolution.³

Hamilton estimated that the "current cash of the country" before the Revolution was thirty million dollars, of which eight millions were in coin. Webster's estimate of the coin was ten millions. We shall now review the effect of adding to it several hundred millions of genuine notes, a vast but unknown sum of counterfeits, besides smaller issues of some twenty other kinds of money. The Continental notes bore the following legend: "The United Colonies. Three Dollars. This Bill entitles the Bearer to receive three Spanish milled Dollars, or the value thereof in gold or silver, according to the Resolutions of the Congress, held at Philadelphia, the 10th of May, 1775. Continental Currency." This legend was a promise to pay the bill with Spanish milled dollars, or else gold and silver bullion of equal value. The bills were therefore not money, they were not legal-ten-

³ Justice Gaynor recites the entire history of the Long Island Water Supply Company; how it started in the then town of New Lots, with a plant costing less than \$200,000, "but, after the demoralizing manner and vogue of our day and generation, with corporations possessing public franchises received as gifts from the community, it issued stock for \$250,000 and bonds for \$500,000." When New Lots was annexed to Brooklyn the city officials secretly entered into a contract to purchase the plant for \$1,350,000. He recites the foiling of this attempt through the courts, and tells how, even after this, it was only with great difficulty that a disinterested Commission could be got to consider the case. The award made was \$570,000, which allowed the company the highest figure. "For my part I do not think there is any likelihood of the city taking the franchise and plant of this company until probably two or three million dollars are paid for it." Justice Gaynor continued, "I have followed the course of such things for years. If you will take the trouble to ascertain where the stock of the company is under a blanket, you will understand me fully. We do not even build a bridge across the East River without buying the right from some private company." *N. Y. Times*, March 2, 1899.

ders; they were not receivable for taxes or any other obligation due to the State (for the assembling and actions of the Congress amounted to the erection of a State); they were simply promises, promises which patriots should never have required and which the Congress should never have made. We did better in the Civil War. The greenbacks contained no promise which was not dischargeable in themselves; they were legal-lenders for all purposes except customs-dues and interest on the public debt; they were MONEY. And behold the moral: the greenbacks, which promised nothing but themselves, were paid in coins, while the Continental promises to pay coins or bullion were never paid at all. At the same time it must be remembered that the United States at the period of the Revolution constituted merely a nascent State, practically without resources, or credit, whilst at the time of the Civil War they were fully grown, rich and prosperous. If the definition of a perfect money is one that has no other possible use or function than that of measuring value, it goes without saying that such perfect money can only be maintained by a perfect State.

The first issue of Continental notes were of the denominations of 1, 2, 3, 4, 5, 6, 7, 8 and 20 dollars each and the total amount of the emission was two million dollars. The various systems submitted to the Congress were: 1st, that each Colony should itself issue the sum of notes which should be apportioned to it by Congress; 2nd, that the United Colonies should issue the whole sum necessary and each Colony become bound to redeem its proportion; and 3rd, that Congress should issue the whole sum, each colony to redeem its own proportion and the United Colonies be bound to pay the portion which any Colony might fail to redeem. The Congress substantially adopted this last system. All of them were bad and this one was as bad as any. The resolution ran: "That the twelve Confederation Colonies (Georgia not yet being included) be pledged for the redemption of the bills of credit, now directed to be emitted." Each Colony was to promise to pay its proportion in four annual installments, the first by the last day of November, 1779, the fourth by the last day of November, 1782. We here perceive the germ of that Safety Fund system which was adopted by the banks at a later period, after the states had granted, for nothing, to private bankers the sovereign prerogative of issuing bills of credit designed to circulate as money.

The various emissions of Continental notes and their value from time to time in silver dollars (that is to say, the sum in notes necessary to purchase one Spanish milled dollar) is shown in the following

table, the values in the second valuation column being the average for the first whole month which followed the date of each new issue:

Emissions and Coin Value of Continental Notes.

Ordered.	Emissions.	For \$1 in Coin.	For \$1 in Coin.
1775.			
June 22,	\$2,000,000	\$1.00	\$1.00
July 25,	1,000,000	1.00	1.00
November 29,	3,000,000	1.00	1.00
1776.			
January 5,	10,000	1.00	1.00
February 17,	4,000,000	1.00	1.00
May 9,	5,000,000	1.00	1.00
July 22,	5,000,000	1.00	1.00
November 2,	500,000	1.00	1.00
December 25,	5,000,000	1.00	1.00
1777.			
February 26,	5,000,000	1.00	1.09
May 20,	5,000,000	1.00	1.20
August 15,	1,000,000	1.09	1.75
November 7,	1,000,000	1.39	3.10
December 3,	1,000,000	1.46	3.25
1778.			
January 8,	1,000,000	—	3.50
January 22,	2,000,000	—	3.50
February 16,	2,000,000	—	3.70
March 5,	2,000,000	2.01	4.00
April 4,	1,000,000	—	4.00
April 11,	5,000,000	—	4.00
April 18,	500,000	2.30	4.00
May 22,	5,000,000	2.65	4.00
June 20,	5,000,000	—	4.25
July 31,	5,000,000	3.49	4.50
September 5,	5,000,000	4.00	5.00
September 26,	10,000,100	5.47	5.00
November 4,	10,000,100	5.37	6.34
December 14,	10,000,100	—	7.42
1779.			
January 14,	50,000,400	—	8.68
February 3,	5,000,160	—	10.00
February 19,	5,000,160	10.00	10.00
April 1,	5,000,160	11.00	12.15
May 5,	10,000,100	13.70	13.42
June 4,	10,000,100	—	14.77
July 17,	5,000,180	—	16.30
July 17,	10,000,100	18.18	16.30
September 17,	5,000,000	—	20.30
September 17,	10,000,080	—	20.30
October 14,	5,000,180	23.25	23.08
November 17,	5,000,040	—	25.93
November 17,	5,000,500	—	25.93
November 29,	10,000,140	26.31	25.93
Total,	\$242,060,780		

It will be observed that there are two sets of coin valuations attached to the emissions. The first one is official and is printed in the monthly report of the United States Bureau of Statistics for No-

vember, 1872, p. 212. This scale of depreciation is deduced from Gen. George Washington's Account Current with the government of the United States. The second set of coin valuations is copied from an unsigned article in Harper's Magazine for March, 1863.

The American Almanac for 1879, p. 81, states that the maximum issues of Continental notes amounted to \$359,546,825; but I am unable to account for the difference, unless it includes the new emissions of 1781, which were of a totally different character. Although the emissions of the Old Tenors ceased in 1779, the value of the bills continued to decline, so that for \$1 in silver coin the following sums of bills (according to Harper's) had to be paid: Year 1780, January, \$29.34; February, \$33.22; March, \$37.36; April, \$40.00; May, \$46.00; June, \$64.00; July, \$89.00; August, \$70.00; September, \$71.00; October, \$72.00; November, \$73.00; December, \$74.00; year 1781, January, \$74.00; February, \$75.00.

In referring to this table two considerations must always be borne in mind. First, the Continental notes were not the only money in circulation; there were many other kinds of money; and more than all there were prodigious quantities of counterfeits afloat. These last did more than anything else to depreciate the value of the mass. Second, the quantity attainable of Spanish milled dollars was not constant, but fluctuated enormously, as when the British made them scarce by purchasing them with their counterfeit notes, or the French auxilliary troops made them plentiful by expending them among the people. Further evidences on the subject of counterfeits will now be brought forward. The attention of the American authorities was called to the subject of counterfeiting so early as August 1st, 1776, when an ordinance was passed condemning counterfeiters of Continental, or of State bills of credit to be punished by having their ears cut off and being whipped and fined. But the counterfeiters were safe within British lines, where they plied their nefarious trade with the knowledge and connivance of the authorities. In 1775, the British authorities had begun to disseminate counterfeits of the Continental (paper) money, as they afterwards did in respect to the assignats of revolutionary France. Extensive counterfeiting also went on in America. Walker, on "Money," 330.

In November, 1776, the British authorities at New York permitted the following scurrilous advertisement to appear in the Gazette: "Wanted—by a gentleman full of curiosities, who is shortly going to England, a parcel of Congress notes with which he intends to paper some rooms. Those who wish to make something of their stock in

that commodity, shall, if they are clean and fit for the purpose, receive at the rate of one guinea per thousand for all they can bring before the expiration of the present month. Inquire of the printer."³

Great Britain was very confident that by ruining the circulating medium of America the people would return to their allegiance; hence the desperation with which counterfeiting was practiced by the British agents. Soon after their issue, the bills of credit emitted by Congress were counterfeited and a nest of counterfeiters was destroyed at Cold Springs, on Nassau Island. The British officials also embarked in the business. Gen. Howe abetted and patronized those who were engaged in making and pushing these spurious issues into circulation. "A shipload of counterfeit Continental money" says Phillips, "coming from Britain, was captured by an American privateer." . . . "Persons accompanying an English flag of truce are known to have largely made use of the opportunity for disseminating the fraudulent notes." The British government promoted the business of counterfeiting extensively, because it was thought that if the credit of the Continental money could be destroyed, the Americans would be obliged to submit, from lack of funds, to maintain their cause. (Bolles, 150-157.)

May 8, 1777. "Some days ago a villain was taken up at Peekskill in New York, in whose custody were found 88 counterfeit Connecticut 40s. bills and one of 30 dollars Continental currency, badly done, being paler and fainter impressed than the true ones. Those of Connecticut are done on copper plate, and are not easily to be distinguished from the true ones, but from that circumstance the true ones being done at the common printing press. Another of these adventurers with £2,700 of counterfeit money about him is secured at Peekskill. It seems they were tempted to follow this desperate employment by the terms offered in the following advertisement taken from the *Gaine's New York Gazette* (Tory) of April 14th last: "Persons going into the other Colonies may be supplied with any number of counterfeit Congress notes for the price of the paper per ream. They are so nicely and exactly executed that there is no risk in getting them off, it being almost impossible to discover that they are not genuine. This has been proved by bills to a very large amount which have been successfully circulated. Inquire for Q. E. D., at the Coffee House from 11 P. M. to 4 A. M. during the present month."

³ *New York Gazette*, November 28th, 1776.—Cited in *Diary of the Am. Rev'n* by Frank Moore, N. Y., 1880, 1, 337.

Pennsylvania Evening Post, May 13th, 1777, in Moore's Diary, 1, 440-1.

The wife of John Adams, writes May 9th, 1777: "A most horrid plot has been discovered of a band of villains counterfeiting the New Hampshire currency to a great amount. No person scarcely but what has more or less of these bills." Bolles, p. 153. So many counterfeits were pushed into circulation, especially of the Continental bills dated May 20th, 1777, and April 11th, 1778, that Congress resolved to retire the whole of these two emissions (and did so). Bolles, p. 153. The first notice of counterfeits by Felt appears under the date of May 3rd, 1777. As this and the foregoing notices coincide very closely with the first depreciation of the notes, we are at liberty to conclude that such depreciation was due less to the quantity of genuine Continental notes thus far issued, namely 30 millions, than to the infusion into the circulation of an unknown quantity of well executed counterfeits difficult to distinguish from the genuine notes. Under date of June 25th, 1777, Felt, 174, again notices counterfeits in the circulation. About July 3rd, 1777, the English imported their counterfeit Continental issues into the Delaware. It now began to be publicly suspected that these counterfeits were made, or authorized, or their issue connived at, by the British authorities; a suspicion that did much to injure the credit of the genuine notes. About December 19th, 1777, counterfeits circulated by the agents of Sir William Howe, began to make their appearance.

In 1778, a quantity of counterfeit American bills of credit on the way from Scotland to New York was captured by an American privateer and destroyed. "Hist. Colonial Paper Money." In January, 1779, counterfeits had become so numerous that, as before stated, Congress recalled and destroyed certain entire emissions of genuine notes. Among these was the issue of April 11th, 1778, of which it is believed but a single note is extant at the present day.

In the "Penn. Packet," published March 13th, 1779, is the following: "The unnatural enemies of this country, not satisfied with their frequent but fruitless attempts to destroy the credit of our paper currency, have, at length, introduced large sums of counterfeit Half Joes and Dollars amongst us, in order to buy up the paper money and thereby stamp a discredit upon it; but thank God this villainy has been detected in its bud, though the perpetrators of the same are still unknown. The Half Johannes are admirably well imitated and require the nicest observation to distinguish the genuine from the counterfeit." (Bolles, p. 156.)

We have now to consider the various kinds of money that were in circulation in the American Colonies or states during the period when the Continental notes were issued, that is to say 1775-81. These were: 1. Gold and silver coins. Of these the estimates vary from 8 to 10 million dollars; but they began to disappear from circulation in 1777 and by 1778 they were no longer to be seen. 2. Copper coins. These remained in circulation until 1779, but there is no estimate of the quantity. 3. Colonial notes or bills of credit. 4. Counterfeit Colonial notes. 5. Continental notes, as per table. 6. Secret issues of Continental notes. Schuckers, III, says about \$58,000,000,000. 7. Counterfeit Continental notes. 8. Continental 4 per cent. loan certificates, 1776. These circulated for a time as money. 9. Quartermaster's certificates circulating as money. Schuckers, 69. 10. Registers' certificates circulating as money. Schuckers, 85. Loan-office certificates. Schuckers, 107. 11. Lottery tickets circulating as money, 1776. Schuckers, 20. An issue was made in 1782. Bronson, 104. 12. Notes issued by private banks authorized by the various colonies or states. Amount not known.* 13. Tory notes, 1777. 14. Private bills of exchange for small sums, intended to circulate as money. 15. Private issues known as "tokens" or "shin-plasters," 1775. Schuckers, 73-4. 16. "Country pay," 1780 and 1781. Schuckers, 62, 63, 95; Bronson, 124, 137. In addition to these various media of exchange reference is made in various authorities to coins employed in special contracts and to other exceptional moneys.

That amidst this rabble of rival moneys, all struggling into the circulation at once, the Continental notes managed to retain any footing at all, affords one of the strongest proofs that can be offered of the vitality of paper money. Properly issued and guarded against counterfeiting, the limits of issue rigidly maintained, and the field left entirely to themselves, all other moneys being forbidden, these notes might not only have retained their original value, they might in time have advanced to a premium in coins of like denominations. This is the objective point toward which all paper issues should be directed: the command of a premium in coins of like denominations. When this object is once demonstrated to be within the compass of practical attainment, the use of gold and silver coins as money will fade into the barbarous past.

* With regard to the origin of private bank notes in America, see Appendix.

APPENDIX.

EARLY AMERICAN BANK NOTES.

THE earliest intimation of Bank notes in the British-American Colonies occurs in Macgreggor, who asserts that about the year 1680 a "Land bank" was established in South Carolina. This date coincides with the period when Robert Patterson, founder of the Bank of England, was in America, and there may be some connection between the two events.

Macgreggor also states that in 1662 silver coins were struck in Maryland. As a Bank of issue was established in Massachusetts shortly after the Pine Tree coins were put in circulation, it seems not unlikely that a similar institution followed the emission of silver coins in Maryland; though this conjecture is not supported by any evidence met with in the various authorities on Colonial money consulted by the author.

In 1686 John Blackwell and six others, persons united to establish a Bank of issue in Boston, Massachusetts.

In 1715 a Bank of issue, based upon landed assets, was established in Boston by John Colman and others. Its notes appear to have remained in circulation so late as 1719, and perhaps later. (Felt.)

Private Banks of issue in Massachusetts are mentioned as having been established "upon a silver basis," during the term of Governor Belcher.

Owing, among other reasons, to the coining of the Pine Tree money in Massachusetts, the Crown vacated the Charter of the Colony in 1685, and a few months later Hull's mint was closed. (Bronson, 19.) So soon as this coinage ceased, the project of a Bank, which many years before had agitated the Colony, was revived. (Bronson, 27.) "A partnership was formed which circulated notes based on land-security." (Bronson, 27, citing Felt, 47.)

In May, 1732, a charter was granted by the General Assembly of Connecticut to Thomas Seymour, John Curtiss, John Bissell, Solomon Coit and 57 others, under the name of the "New London Society, united for Trade and Commerce;" soon after which time the

Society began to issue Bank notes or bills of credit. The like had been done in Boston several years before. (Bronson, 43; Felt, 71.) The New London Bank notes were dated October 25, 1732, and were circulated "as a medium of trade current, as equal to silver coin at 16s. per ounce." Although this issue was "hailed by the business part of the community with delight," the legislature repealed the New London Society's charter in 1733 and issued Colonial bills in place of the Bank notes; thus retiring the latter. (Caulkins, cited by Bronson, 43.)

In 1739, a Bank of issue, based on mortgages upon lands, was established in Massachusetts "to redress the existing circumstances which the trade of this Province labours under for want of a medium." In the same year was established a "specie" Bank of issue. Both of these institutions issued notes, but in 1740 the British Joint Stock Company's Act of that year was put in force by the Colonial government and both banks were compelled to commence winding up, though their notes continued to circulate for several years. In the early part of their career their issues amounted to about £110,000. In 1742 the outstanding Land Bank issues are said to have amounted to £40,000, while those of the "specie" Bank amounted to £120,000. Alluding to the repressive measures of the Crown, Sumner says: "*There can be no doubt that the bitterness engendered by this conflict was one great cause of the Revolution.*"

PLAYING-CARD CURRENCY OF CANADA.

In 1685 such was the dearth of money in Canada that the French Colonial officials found it necessary to make an immediate issue of paper notes. Rather than await the comparatively slow process of having the notes engraved or printed, they adopted the strange expedient of cutting a vast number of playing cards into four pieces each and writing upon them sums in *livres*, to which they signed their names and official titles. In this manner about two million livres of paper currency were emitted, greatly to the relief of the Colony. This "playing-card currency," as it was called, circulated for many years, until in 1714 it was partially or wholly paid off in coins or else in bills of exchange on France. (Weeden's "Economical and Social Hist. of New England.")

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