Of Coptic the press of the Propaganda possessed a fount, and a specimen was issued in 1636, in which year also Kircher’s *Prodromus Coptus* appeared from the same press. In England David Wilkins’s edition of the New Testament was printed in 1716 from Coptic types cast with matrices which Dr Fell had presented to Oxford in 1667. The alphabets shown in the introduction and prolegomena to the London *Polyglott* of 1655 and 1657 were cut in wood.

Of Samaritan the press of the Propaganda had a fount in 1636, and the Paris *Polyglott,* completed in 1645, contained the entire Pentateuch in type the punches and matrices of which had been specially prepared under Le Jay’s direction. The fount used for the London *Polyglott* in 1657 is admitted to have been an English production, and was probably cut under the supervision of Usher.

With Slavonic type a psalter was printed at Cracow as early as 1491, and reprinted in Montenegro in 1495. The only Slavonic fount in England was that given by Dr Fell to Oxford, and this, Mores states, was replaced in 1695 by a fount of the more modern Russian character, purchased probably at Amsterdam. The *Oratio Dominica* of 1700 gives a specimen of this fount, but renders the Hieronymian version in copper-plate. Modern Slavonic, better known as Russian, is said to have appeared first in portions of the Old Testament printed at Prague in 1517-19. Ten years later there was Russian type in Venice. A Russian press was established at Stockholm in 1625, and in 1696 there were matrices in Amsterdam, from which came the types used in Ludolph’s *Grammatica Russica,* printed at Oxford in that year, and whence also, it is said, the types were procured which furnished the first St Petersburg press, estab­lished in 1711 by Peter the Great Mores notes that in 1778 there was no Russian type in England, but that Cottrell was at that time engaged in preparing a fount. It does not appear that this project was carried out, and the earliest Russian in England was cut by Dr Fry from alphabets in the *Vocabularia,* collected and published for the empress of Russia in 1786-89. This fount appeared in the *Pantograρhia* in 1799.

A fount of the Etruscan character cut by William Caslon about 1733 for Swinton of Oxford was apparently the first produced. Fournier in 1766 showed an alphabet engraved in metal or wood. In 1771 the Propaganda published a specimen of their fount, and Bodoni of Parma in 1806 exhibited a third in his *Oratio Dominica.*

Runic types were first used at Stockholm in a Runic and Swedish *Alphabetarium* printed in 1611. The fount, which was cast at the expense of the king, was afterwards acquired by the univer­sity. About the same time Runic type was used at Upsala and at Copenhagen. Voskens of Amsterdam had matrices about the end of that century, and it was from Holland that Francis Junius is supposed to have procured the matrices which in 1677 he pre­sented to Oxford. This fount appears in the *Oratio Dominica* of 1700, and in Hickes’s *Thesaurus,* 1703-5, and it remained the only one in England.

Matrices of Gothic type were presented to Oxford by Francis Junius in 1677, and a fount of them was used for the *Oratio Dominica* of 1700 and in Hickes’s *Thesaurus.* A different fount was used for Chamberlayne’s *Oratio Dominica,* printed at Amsterdam in 1715. Caslon cut a fount which appeared in his first specimen in 1734. This and the Oxford fount were the only two in England in 1820.

Founts of Icelandic, Swedish, and Danish were included in Junius’s gift to Oxford in 1677, and were, perhaps, specially pre­pared in Holland. The first-named is shown in the *Oratio Dominica* of 1700 and in Hickes’s *Thesaurus.* Printing had been practised in Iceland since 1531, when a *Breviary* was printed at Hoolum, in types rudely cut, it is alleged, in wood. In 1574, however, metal types were provided, and several works produced. After a period of decline, printing was revived in 1773, and in 1810 Sir George M'Kenzie reported that the Hoolum press possessed eight founts of type, of which two were Roman, and the remainder of the common Icelandic character, which, like the Danish and Swedish, bears a close resemblance to the German.

For the Anglo-Saxon language the first type was cut by John Day in 1567, under the direction of Archbishop Parker, and appeared in Ælfric’s *Paschal Homily* in that year and in the *Ælfredi Res Gestæ* of Asser Menevensis in 1574. Anglo-Saxon type was used by Browne in 1617, in Minsheu’s *Ductor in Linguas* ; and Haviland, who printed the second edition of that work in 1626, had in 1623 made use of the character in Lisle’s edition of Ælfric’s *Homily.*

The first fount of Irish character was that presented by Queen Elizabeth to O’Kearney in 1571, and used to print the Catechism which appeared in that year in Dublin, from the press of Franckton. But the fount is only partially Irish, many of the letters being ordinary Roman or Italic. It was used in several works during the early years of the 17th century, and as late as 1652 in Godfrey Daniel’s *Christian Doctrine,* printed in Dublin. The Irish semin­aries abroad were better supplied with Irish type. A new type was cut by Moxon, and appeared in 1681 in Boyle’s New Testament, printed by Robert Everingham.

The earliest specimen of music type occurs in Higden’s *Poly- chronicon,* printed by De Worde at Westminster in 1495. The square notes appear to have been formed of ordinary quadrats, and the staff-lines of metal rules imperfectly joined. In Caxton’s edi­tion of the same work in 1482 the space had been left to be filled up by hand. The plain chant in the Mainz psalter of 1490, printed in two colours, was probably cut in wood. Hans Froschauer of Augsburg printed music from wooden blocks in 1473, and the notes in Burtius’s *Opusculum Musices,* printed at Bologna in 1487, appear to have been produced in the same manner ; while at Lyons the missal printed by Matthias Hus in 1485 had the staff only printed, the notes being intended to be filled in by hand. About 1500 a musical press was established at Venice by Ottavio Petrucci, at which were produced a series of mass-books with lozenge-shaped notes, each being cast complete with a staff-line. In 1513 he re­moved to Fossombrone, and obtained a patent from Leo X. for his invention of types for the sole printing of figurative song (*cantus figuratus).* Before 1550 several European presses followed Petrucci’s example, and music type was used, among other places, at Augs­burg in 1506 and 1511, Parma in 1526, Lyons in 1532, and Nurem­berg in 1549. In 1525 Pierre Hautin cut punches of lozenge-shaped music at Paris. Round notes were used at Avignon in 1532. In England, after its first use, music-printing did not become general till 1550, when Grafton printed Marbecke’s Book of Common Prayer, “noted” in movable type, the four staff-lines being printed in red and the notes in black. There are only four different sorts of notes used,—three square and one lozenge. About 1660 the de­tached notes hitherto employed began to give place to the “new tyed note,” by which the heads of sets of quavers could be joined. But at the close of the 17th century music-printing from type be­came less common, on account of the introduction of stamping and engraving plates for the purpose.

Printing for the blind (compare vol. iii. p. 826) was first intro­duced in 1784 by Valentin Haiiy, the founder of the asylum for blind children in Paris. He made use of a large script character, from which impressions were taken on a prepared paper, the im­pressions being so deeply sunk as to leave their marks in strong relief and legible to the touch. Haüy’s pupils not only read in this way, but executed their own typography, and in 1786 printed an account of their institution and labours as a specimen of their press. The first school for the blind in England was opened in Liverpool in 1791, but printing in raised characters was not successfully ac­complished till 1827, when Gall of the Edinburgh asylum printed the Gospel of St John from angular types. Alston, the treasurer of the Glasgow asylum, introduced the ordinary Roman capitals in relief, and this system was subsequently improved upon by the addition of the lower-case letters by Dr Fry, the type-founder, whose specimen gained the prize of the Edinburgh Society of Arts in 1837. Several rival systems have competed in England for adoption, of which the most important are those of Lucas, Frere, Moon, Braille, Carton, and Alston ; the last-named, as perfected by Dr Fry, seems likely to become the recognized method of print­ing for the blind in all European countries.

As regards initials in the earliest printed books, see above, p. 686. The trouble and cost involved in the use of the initial director early suggested the use of wood-cut initials, and Erhard Ratdolt of Venice, about 1475, is generally supposed to have been the first printer to introduce the *literæ florentes,* called also *lettres tourneures,* or *typi tomatissimi,* which eventually superseded the hand-painted initials. Caxton introduced one or two kinds in 1484. Among the earliest to be used are the so-called Lombardic initials or capitals. The more elaborate initials, such as those used in the Mainz indulgences and psalter, by Aldus at Venice, by Johann Schoeffer at Mainz in 1518, by Tory and the Estiennes at Paris, by Froben at Basel, and by the other great printers of their day, were known as *lettres grises.* Besides these, the ordinary “two-line letters” or large plain capitals came into use ; and these were generally cast, whilst the ornamental letters were for the most part engraved on wood or metal.

Type ornaments and flowers began, like the initials, with the illuminators, and were afterwards cut on wood or metal. The first printed ornament or vignette is supposed to be the scutum or arms of Fust and Schoeffer in their edition of the Bible of 1462. There is no vignette in the Subiaco *Lactantius* of 1465 (as stated by Mr Reed, *Letter Foundries,* p. 82). In Holtrop’s *Monum. Typogr. des Pays-Bas* may be seen borders used by some of the earliest printers of Holland (1475-1490) which would not look bad even in the present time. Caxton in 1490 used ornamental pieces to form the border for his *Fifteen O’s.* At the same time the Paris printers engraved still more elaborate border pieces. At Venice entire frames were engraved in one piece, while Aldus as early as 1495 used tasteful head-pieces cut in artistic harmony with his *lettres grises.* Early in the 16th century we observe detached ornaments and flourishes which have evidently been cast from a matrix.

*Literature.—*Besides the works of Berjeau, Bernard, Blades, Hawkins, Hessels, Holtrop, Noel Humphreys, Koehler, Jules Philippe, T. B. Reed, Sotheby, Weigel, &c., already mentioned, consult also Bigmore and Wyman, *A Biblio­graphy of Printing*, London, 1880 ; Geo. Wolfg. Panzer, *Annales Typog.,* Nurem­berg, 1793, &c. ; Lud. Hain, *Repertorium Bibliog.,* Stuttgart, 1826-38; Holtrop, *Cat. Librorum Sec. XVo Impressorum in Bibl. Regia Hagana,* The Hague, 1856 ; Μ. F. A. G. Campbell, *Ann. de la Typog. Néerlandaise au XVe Siècle,* The Hague, 1874 ; Rob. Sinker, *A Cat. of the XV. Century Printed Books in the Library of*