A BRIEF HISTORY
of
PRINTING IN AMERICA

CONTAINING A BRIEF SKETCH
OF THE DEVELOPMENT OF
THE NEWSPAPER AND SOME
NOTES ON PUBLISHERS WHO
HAVE ESPECIALLY CONTRIBUTED TO PRINTING

FREDERICK W. HAMILTON, LL.D.

EDUCATIONAL DIRECTOR
UNITED TYPOTHETAE OF AMERICA

PUBLISHED BY THE COMMITTEE ON EDUCATION
UNITED TYPOTHETAE OF AMERICA
1918
PREFACE

THE history of printing in America is radically different from that of the same art in Europe. The art was well developed before it crossed the Atlantic. The struggles attendant upon the organization of the trade and its relation with the government were all fought out in the old lands.

These elements of interest are lacking here, but in their place we have the romance and interest of invention, the fascination of interesting personalities, the thrill of history in the making.

No attempt has been made here to go into the story of the American invention of printing machinery and appliances. The most important portion of that story will be found in another volume of this series.

The story of the introduction of printing and its spread through the colonies before 1775 has been told with some detail. The development of the newspaper has been sketched. The reader is introduced to a few great printers who have made lasting contributions to American life, art, and industry. Some account is given of a few of the leading printer-publisher. Familiar names will be missed. Sometimes they are omitted because they are publishers only and not printers, more often because space lacked for the treatment of any but a few typical cases. The story of the government printing office is briefly told and there is a very short sketch of the organization of the industry among employers and employees.

The writer ventures to hope that a study of this book may lead to a wider knowledge and deeper interest in that history of America of which the history of American printing is a part.
## CONTENTS

<table>
<thead>
<tr>
<th>Introductory</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter I</strong></td>
<td></td>
</tr>
<tr>
<td>The Beginnings</td>
<td>11</td>
</tr>
<tr>
<td><strong>Chapter II</strong></td>
<td></td>
</tr>
<tr>
<td>Newspapers</td>
<td>22</td>
</tr>
<tr>
<td><strong>Chapter III</strong></td>
<td></td>
</tr>
<tr>
<td>Some Great American Printers</td>
<td>33</td>
</tr>
<tr>
<td><strong>Chapter IV</strong></td>
<td></td>
</tr>
<tr>
<td>The Public Printing Office</td>
<td>59</td>
</tr>
<tr>
<td><strong>Chapter V</strong></td>
<td></td>
</tr>
<tr>
<td>Some American Publishers</td>
<td>64</td>
</tr>
<tr>
<td><strong>Chapter VI</strong></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>76</td>
</tr>
<tr>
<td><strong>Chapter VII</strong></td>
<td></td>
</tr>
<tr>
<td>Conclusion</td>
<td>83</td>
</tr>
<tr>
<td><strong>Supplementary Reading</strong></td>
<td>84</td>
</tr>
<tr>
<td><strong>Review Questions</strong></td>
<td>85</td>
</tr>
</tbody>
</table>
INTRODUCTORY

THE history of printing in the United States differs considerably from the history of printing in the old world. For more than a century American printers were merely followers and imitators of the English. Many of the workmen were imported from England, while some born in the American colonies went to England to learn the art. It is doubtful if any presses were built in the American colonies before the second half of the eighteenth century. The greater part of the type used during this period was imported, as well as a very large share of the paper. Under these conditions the early American work, as might be expected, was very poor. The paper was mostly of an inferior grade, the type was used until it was worn out, and presses were kept in service as long as it was possible to make any kind of an impression with them. Almost all of the workmanship was correspondingly bad.

With the close of the Revolutionary War a better condition began. The work of Franklin in Philadelphia and Isaiah Thomas in Worcester exerted a very great influence. The achievement of independence had given birth to a feeling of confidence and a rapid development of the new states industrially and socially which were accompanied by a corresponding improvement in the printing industry. American enterprise very soon began to make itself felt in the invention of new machines and processes and in the improvement of the old ones. American inventive genius and skill in adaptation gave American printers very practical
advantages and in many respects made them leaders in the industry. Information on these points will be found scattered throughout this series of text books in the several volumes which deal with machines and processes. It is perhaps sufficient to say in this place that the United States has been and is in the first rank of progress in these regards.

In the colonial days the governments of the several colonies assumed the right of censorship. Virginia undertook to prevent printing altogether. Massachusetts established a board of censors and other colonies took similar measures. In so doing the colonies simply followed the current European example of their time. As a rule the colonial attempts to censor the press are not found to be based on special statutes but on English precedents. It can hardly be said that the censorship of printing was a part of the English common law at the dawn of the eighteenth century when the special Star Chamber Decrees under which printing had been censored in England had expired. Nevertheless, the current practice the world over was so uniform that when the colonial governments assumed the power to censor printing as a police measure no one questioned their authority so to do or asked for the statutory basis of such authority.

Gradually, however, as the spirit of independence grew in the colonies and the colonies became freed from the yoke of European custom the basis of government control of the press changed. Instead of being tried under edicts offending printers were proceeded against by means of libel suits or suits involving certain minor forms of sedition. When the colonial government lost its suit against Peter Zenger, of New York, in 1734, the precedent was established which really freed the American press. With the Revolution and the consequent establishment of the government
of the United States the principle of the freedom of the press, not only as applied to newspapers but as applied to printed matter generally, was fully established. Of course, liberty of the press is not intended to mean absolute license. The printer, whether he be a manufacturer of newspapers or of other printed matter, is not at liberty to spread defamatory and injurious statements about individuals or to circulate literature which is obscene or misleading. These and certain other abuses of the printing press are indirectly controlled by the laws governing the use of the mails. The abuse of political opponents, no matter how extreme in character, is rarely considered as within the scope of the laws regarding libel. Moreover, the publication of defamatory or injurious statements concerning individuals is not ordinarily held to be libel if the publisher is prepared to prove their truth. So far as governmental control of the printing press is concerned the United States enjoys very nearly absolute freedom.

Ecclesiastical censorship has never existed in the United States. The intimate union of church and state in colonial Massachusetts, where for a long time only members of the church were allowed to vote, made the government censorship practically ecclesiastical, although in form it was purely lay. Elsewhere in the colonies where the press was strictly controlled the government was very sensitive on the subject of things regarded as injurious to the established religion. In no case, however, were the principles of ecclesiastical censorship asserted or acted upon. With the adoption of the Constitution of the United States in 1787 ecclesiastical censorship, even indirect, became impossible.

The industry has never been organized in the United States in the sense in which we have found it organized
in England and on the continent. The trade guilds, although retaining a considerable measure of power at the time when the first English settlements were made in America, never spread to this side of the Atlantic. They were already decadent and the principles upon which they were founded never took root here. The development of the printing industry, therefore, has not been hampered or interfered with by guild organization or by regulation through government charter. It has been left entirely free to be governed by the ordinary economic laws which control all business except in so far as the operation of these laws may have been restrained or modified by voluntary organizations. For about two hundred years there was no organization excepting in a few localities and on a small scale. Later both the journeymen and the master printers formed voluntary organizations along the familiar lines of trade unionism. These organizations will be dealt with later. It is enough perhaps to state here that they are voluntary and that by no means all of either the employers or the employees are enrolled in the organizations.
CHAPTER I

THE BEGINNINGS

THE beginnings of printing in America are associated with Massachusetts and with Harvard University. In the very early days of both the colony and the college there lived in England a minister by the name of Jesse Glover. His name is variously spelled as Josse, Joss, and Jos, but the form Jesse is probably correct. Unlike most ministers of that day and this, the Rev. Mr. Glover was a man of considerable wealth. He was very much interested in the colonies of Puritans and Independents in New England and also in the newly founded Harvard Academy, as it was then called. It seemed to him that the best interests of New England would be served by the establishment of a press at Harvard which could print for the colonial government, for the churches, and for the new institution of learning. He laid his plans for the setting up of the press and the opening of a shop through which should be marketed not only a product of the press but other books and general supplies of stationery. Mr. Glover made a considerable contribution himself, raised sufficient additional money among his friends to secure the establishment of the enterprise, and sailed for America, bringing with him a press, type, a printer by the name of Stephen Day or Daye, and supplies of paper and books for his book shop.

Unfortunately Mr. Glover died on the voyage. When his widow landed in America she found herself charged not only with the care of a family but with that of the printing enterprise as well. She was soon
relieved of these cares, however, by marriage with the Rev. Mr. Henry Dunster, who was then president of Harvard. Under the laws of that day, which did not permit married women to hold property, Mrs. Dunster's possessions passed into the hands of her husband. Mr. Glover had left one or more children who were undoubtedly heirs to a portion at least of the Glover estate, but the children were minors and Dunster appears to have taken into his own hands and used for his own benefit the entire estate, or at least so much of it as had been brought to America where he could lay his hands upon it. It required a law suit afterward to settle the respective rights of the parties. In the course of this law suit it appeared that the press, which for a long time was the only one in America, had belonged to Mr. Glover personally, but that the type was the property of the college. Probably it was bought out of subscriptions under an assurance that these subscriptions would be applied to the benefit of the college and the subscribers were secured against the diversion of their money to the private benefit of Glover by the arrangement that the college should own the type.

Cambridge was then and for a short while after what it had been originally intended to be, the seat of government of the Massachusetts Bay Colony. It will be remembered that the Massachusetts Bay and Plymouth Colonies had not yet been combined, but were still separate governments. The magistrates of the little Massachusetts Bay Colony were very autocratic folk indeed. They ordered the press to be brought to Cambridge and assumed entire control of it. This control they exercised through Dunster, who for a long time enjoyed whatever profit there was in the industry. Afterward they created a board of censors and governmental control of the press was not
formally abandoned before the Revolutionary War, although it had long ceased to be effective.

For thirty years this was the one place in America where printing was done. When the mandate of the magistrates was executed and the press set up in Cambridge it was, of course, placed in the hands of the printer whom Glover had brought over. This was one Stephen Day or Daye. Day is said to have been a descendant of the great English printer John Day, but if so he inherited neither the craftsman’s skill nor the artist’s taste which distinguished his great name-sake. His printing is extremely poor and rough. Isaiah Thomas, whose history of printing published in 1810 is still the one great authority for the early period of American printing, says that Day was probably trained as a pressman as his work shows marked absence of knowledge and skill as a compositor. The first product of Day’s press was a broadside called the “Freeman’s Oath” which appeared in January, 1639. This was followed by an Almanac and in 1640 appeared the first American book. It was entitled “The Psalms in Meter” and is popularly known as the Bay Psalm book. Aside from the fact that it was the first American book, it had neither value nor interest, although the few copies known to be in existence command a very high price. The metrical version of the Psalms which it contains is crude doggerel. The book itself is deficient in every point of bookmaking. In 1648 or 1649 the management of the printing office passed out of Day’s hands, whether voluntary or otherwise is not known.

His successor was one Samuel Green. Green was born in England in 1614 and came over to America in 1630. Although he continued in the printing business up to the end of a very long life we have no record of him as a printer previous to 1649 and we are without any
It is probable that whatever printing he knew he picked up in the office which he managed. For the first few years the actual printing seems to have continued in the hands of Day. The early books containing Green's imprint exactly resemble the later ones containing that of Day. It is probable that the change had, at first, at least, involved only the responsible management of the printing shop. Day remained in Cambridge until his death in 1668. For his services in introducing printing to the colony the General Court, as the Legislature of Massachusetts was and still is legally called, granted him, in 1641, 300 acres of land. This land he seems never to have taken up as the grant was renewed in 1655. In 1657 the General Court granted him 300 acres more and in 1667 the General Court gave him authority to obtain from a certain Indian chief 160 acres of upland and granted him outright 20 acres of meadow. He appears to have become possessed of other land by purchase. He always, however, appears to have been poor. Land in Massachusetts was not a very valuable commodity at that time. It was only the comparative absence of taxes which enabled the poor printer to keep possession of his broad acres. In 1642 the records show that Day mortgaged 27 acres of land where the city of Cambridge now stands as security for the price of a cow, a calf, and a heifer.

While the shop management was in the hands of Day and his successors the business management and supervision of the press was at first in other hands. President Dunster directed the plant, made the contracts, and supervised the output until a board of censors was appointed by the magistrates. At that time he seems to have turned over the business management of the office to Green. Green seems to have
desired to improve the quality of the work done, but
owing to his apparent lack of knowledge of the industry not much was accomplished until the arrival of Marmaduke Johnson, who was sent out from England in 1660 by the Society for the Propagation of the Gospel among the Indians of New England.

The work of this society included a considerable amount of printing, an important part of which was the translation of the Bible and other religious works into the Indian dialects. For a number of years the society had its printing done in London. About 1654 or 1655 the society sent over a press and a supply of type. This material was installed in Green's office, but was maintained by the society. In 1658 more type was sent out to be used in the work of the society.

John Eliot was then at work upon his translation of the Bible into the language of the New England Indians and Pierson was also at work on Indian translations. No attempt was made to cut special type for the Indian language. The translators endeavored to express the Indian sounds with English letters. It is hardly possible to tell at this date how successful this attempt was, although the Indians were taught to read their own language in the forms devised by Eliot and Pierson. Of course, the Indian language had never previously been reduced to written form.

The society soon perceived that it was not enough to send out presses and type and accordingly they sent out Johnson, as before mentioned. Johnson was a good printer. His advent in Cambridge, however, was the cause of a good deal of disturbance which is amusing now, but was far from amusing 250 years ago. He did not fit at all into the austere and puritanical social life of Cambridge, and his doings greatly scandalized the good people of the town. In spite of the fact
that he was said to have left a wife in England, he proceeded to make ardent love to Green's daughter, very much to the displeasure of Green himself. Finding his personal efforts to stop the love making unavailing, Green applied to the magistrates. A solemn inquiry was held and Johnson was ordered to go back to England. The magistrates, however, seem to have lacked power to enforce their command because Johnson remained in the colony quite undisturbed. The result, however, seems to have been a breaking off of the relations between Johnson and Miss Green, for we soon find Johnson working harmoniously in Green's office. Shortly afterward he married a Cambridge girl, not Miss Green, and settled down for the rest of his life, which lasted only till 1675. What became of the alleged English wife we do not know.

Whatever may have been Johnson's private character, and probably it was not really very bad, he was an excellent workman and the quality of his work together with the unusual type of product of the Cambridge press gave this out-of-the-way printing shop an international reputation. Eliot's Old Testament appeared in 1661 and the completed Bible, including the New Testament, in 1663. This was the first Bible printed in America. It was a very creditable production. The type sent over by the society was excellent, the composition accurate, and the presswork at least fair. In 1670 the press and type of the society were given to Harvard College.

In the meantime the board of censors already mentioned had been appointed by the authorities. In 1664 they took alarm at some things which were published and relieved Dunster from his supervision of the press, appointing a board of censors and decreeing that there should be no presses in the colony except the one at Cambridge. Even the licensing board, how-
ever, was not sufficiently strict to suit the requirements of the General Court, which at this time contained among its members many of the ministers. In 1667 the licensing board gave its approval to the printing of an edition of Thomas à Kempis' "Imitation of Christ." This book has been recognized for centuries as one of the great Christian classics, but as it happened to be written by a Catholic the Puritan members of the General Court scented all sorts of heresy in its pages. They therefore ordered that the printing be stopped and not resumed until the licensing board had thoroughly revised the text. Apparently this was never done and the publication was never completed. Thomas à Kempis edited by seventeenth century New England would indeed be a strange combination.

In 1671 John Usher was given a copyright on the revised statutes of the colony. This is the first American copyright. It is rather interesting to note that Usher was treasurer of the colony, a fact which leads us to suppose that although the pious members of the General Court of that day had never heard of the word "graft" they were not unacquainted with the thing itself.

Green lived until 1702, dying in that year at the advanced age of 87. He continued to print until very near the close of his life. After his death there was no printing done in Cambridge for many years, although the university seems to have retained possession of the presses and type. By the middle of the eighteenth century Thomas Hollis, a rich merchant of London, who was much interested in Harvard gave the college fonts of Greek and Hebrew. The Greek was only used once, being lost in 1761 in a fire which destroyed Harvard Hall in which the type was stored. The Hebrew type escaped, as at the time of the fire
it was in the hands of a Boston printer who was getting out a Hebrew grammar.

From 1638 to 1675 the Cambridge press was the only one in British North America. In the latter year a press was established in Boston under license from Harvard and by permission of the magistrates. The precedent they established at Cambridge was followed in the conduct of this press. A responsible person, not a printer, was appointed as conductor of the press. He was supposed to be the business manager of the enterprise and to be responsible to the authorities for the character of the product. The first conductor of the Boston press was one John Foster. Who did the actual printing we do not know. It was probably some one who had picked up some little knowledge of the trade in the Cambridge office, for the work done was very poor. Foster died in 1680 and was succeeded by Samuel Sewall.

Sewall is one of the interesting figures of early New England history. He was a magistrate and a well known man of affairs. Although utterly without knowledge of printing he conducted the press until 1684, when pressure of his private business compelled him to give it up. At this period, however, printing was not the only thing which was undertaken in New England by men without technical knowledge. Although Sewall was not bred to the law and had no knowledge of it save what he picked up by service as a magistrate and acquired by reading he was appointed chief justice of the colony in 1718. It is the rule rather than the exception in early New England history to find that the judges are, like Sewall, men of affairs without legal training. During Sewall's administration the printing was done by Samuel Green, the son of Green the Cambridge printer. When Sewall gave up the management in 1684 the magistrates
THE BEGINNINGS

appear to have decided to trust to their licensing board and to abolish the clumsy system previously in use. The Boston press passed into the control of Samuel Green and we hear nothing more of the conductors of the press.

Most of these early printers need no mention in a book of this sort. A full description of them may be found in Thomas's History of Printing. One interesting circumstance may be worth notice in passing. Thomas Fleet, a very good printer of this period, was the owner of several negro slaves. He taught one of them to print and also taught him to cut the very crude wood blocks which were used for purposes of illustration, especially for ballads and broadsides of which Fleet printed many. Fleet bred his two sons to the business, and they and the negro worked together in the office until slavery was abolished by the adoption of the Constitution of the State of Massachusetts in 1780. In 1704, Bartholomew Green, another son of the Cambridge printer, established the Boston News Letter, the first newspaper to be established in the colonies on a permanent basis.

The other colonies lagged far behind Massachusetts in the establishment of printing. The second colony to set up a printing press was Pennsylvania. William Bradford, who had served his apprenticeship as a printer in England, set up a press "near Philadelphia" in 1686. Like most of the Philadelphians of that day, Bradford was a Quaker. Not very long after he had established his printing office a disturbance was caused in the colony by one George Keith who assumed a distinctly independent attitude towards the authorities. Bradford did his printing and appears to have sided with him in the controversy. The magistrates indicted Keith, but failed to secure sufficient evidence to have him punished. They did,
however, make it so disagreeable for him that he left Philadelphia and went to New York, although he afterwards returned. On his arrival at New York, Bradford set up a press there in 1693. This was the third one in the colonies and was the only one in New York for thirty years.

Connecticut followed, a press being established in New London in 1709. There were no more presses in Connecticut until past the middle of the century. One was established in New Haven in 1754 and one in Hartford in 1764. Maryland established its first press at Annapolis in 1726. The first press established in Virginia was at Williamsburg, which was then the capital of the colony, in 1729. There were no more until 1736.

The attitude of colonial Virginia was decidedly hostile to the printing press. Sir William Berkley, governor of Virginia, except for a short interval, from 1642 to 1676, once said, "I thank God we have no free schools, nor printing: and I hope we shall not have these hundred years, for learning has brought disturbance and heresy and sects into the world, and printing has divulged them and libels against the government: God keep us from both." Lord Effingham, who was appointed governor in 1683, received special orders, "to allow no person to use a printing press on any occasion whatsoever." In spite of this attitude of the government an attempt was made to start a press as early as 1682 by one William Nuthead. He was promptly driven out, and appears to have been the person who made a similar unsuccessful attempt in Maryland in 1689 with like result.

South Carolina had a press in Charleston in 1730. Rhode Island had one at Newport in 1732. Portsmouth, New Hampshire, had one in 1756, Wilmington, Delaware, in 1761, and Georgia, the last of the colonies to be planted, had one in Savannah in 1762.
This brief statement of the dates and places of the introduction of printing has some points of interest. It shows what colonial towns were then most important, as well as what colonies were most important. The leading colonies in population, wealth and influence were Massachusetts, Pennsylvania, and New York. The leading cities in these colonies were then, as now, Boston, Philadelphia, and New York City, although for many years Salem gave Boston a hard run for the leadership. In some of the other colonies, as will be observed, the center of gravity has materially changed since the Revolutionary War. The few centers sufficed for the printing of the entire group of colonies until a later period. Boston did the work for New England, Philadelphia for the Middle Atlantic States, and Williamsburg and Charleston for the South. These were the great printing centers. It will be observed that up to the time of the Revolution two of the thirteen colonies, namely New Jersey and North Carolina, had no printing press at all, while three of the others had none until after the middle of the eighteenth century.

The simplicity, not to say rudeness, of colonial life in America outside of a few centers is clearly indicated by these facts. A powerful stimulus was given to printing, however, by the political agitations which preceded the Revolutionary War. The fifteen years or so before the outbreak of hostilities in 1775 was a period of considerable intellectual activity. Many new printing establishments were started in the old centers and in new fields as well and a great amount of controversial literature, largely in the form of newspapers, made its appearance.
CHAPTER II

NEWSPAPERS

As early as 1689 an attempt was made to start a newspaper in Boston. One issue of a sheet called "Publick Occurrences," was published. Although it was merely a recital of happenings it was immediately suppressed by the authorities on the ground that the newspapers were "meddling with high matters." This attitude of the authorities was effective until 1704, when the first number of the Boston News Letter appeared. This was the first paper established in the American colonies. The name was afterwards changed to the Massachusetts Gazette. When the political differences in Massachusetts became acute the Massachusetts Gazette became the recognized organ of the Royalists, or Tories, as they were then called. As such it was the only paper published in Boston during the siege of that town by the American army. The effective occupation of the city by the British troops entirely suppressed all opposition publications. When Boston was evacuated in 1776 and passed again into the hands of the Americans the Massachusetts Gazette ceased to exist.

In 1719 the Boston Gazette made its appearance. At the outbreak of the Revolution this was the leading Whig or patriot organ. It was published by Edes and Gill, whose office was a center of Whig agitation and, later, of agitation for independence. The paper was finally suppressed by the authorities, but not until it had accomplished its purpose.

These papers were followed by others of various sorts and of varying permanency. A detailed account
of them is not necessary here, as it is the purpose of this chapter simply to indicate the establishment and growth of newspapers in the several colonies. A full account of these early papers may be found in the pages of Thomas's History of Printing.

In 1719 the American Weekly Mercury was started in Philadelphia. Philadelphia was thus the second city in the colonies to have a newspaper. The Mercury was very enterprising for those days. As an instance, it may be related that in 1734 it published an account of the battle of Phillipsburg with an illustrated diagram showing the positions and movements of the forces, similar to the diagrams which are now commonly published in historical works.

New York's first paper, the New York Gazette, was started in 1725. In 1733 John Peter Zenger began the publication of the New York Weekly Journal. Zenger had a rickety press and a font of much worn pica type, with which he got out a small but extremely lively sheet. Zenger had opinions of his own and did not hesitate to express them vigorously. He was disposed to be extremely critical of the government and some of his publications excited the wrath of those in authority. In 1734, only about a year after his paper was started, Zenger was sued for libel. This was a government prosecution and it is interesting to note that the old, high-handed methods of suppression had already given way to legal procedure. It is further interesting to note that the suit failed, and this victory of Zenger's may be considered as the beginning of the freedom of the press in America under legal guarantees.

Maryland was next in the field with the Maryland Gazette, started in Annapolis in 1728. It was followed in 1732 by South Carolina, with the South Carolina Gazette, printed at Charleston. Virginia was slow with her newspapers as well as with the printing press.
Her first paper was the Virginia Gazette, started at Williamsburg in 1736. At the date of the battle of Lexington, April, 1775, there were thirty-three papers published in the colonies. These were located as follows:

- Massachusetts ................. 7
- New Hampshire .................. 1
- Rhode Island ................... 2
- Connecticut .................... 4
- Pennsylvania ................... 9
  (3 started since Jan. 1, 1775.)
- Maryland ....................... 2
- Virginia ......................... 2
- North Carolina .................. 2
- South Carolina .................. 3
- Georgia ......................... 1

The newspaper press of those days was entirely different from that of today. The papers of the period before 1760 were nearly or quite all weekly publications. They consisted of a small amount of local news, a certain amount of advertising, and a considerable amount of intelligence concerning the happenings in Europe and in the other colonies. The local news, of course, was fairly up to date. The other news consisted of reprints from foreign papers, information brought by incoming sea captains, and letters received by local individuals. All this information came by mail and was naturally slow in coming, as the sailing of vessels of those days took from six weeks to three months to cross the Atlantic. The information which passed for news was not the up-to-the-minute view of occurrences which we get by telegraph today, but was a leisurely written account of what had happened or been reported to have happened for the week or so preceding the writing of the letter. The advertisements were small cards containing the information
that such and such a merchant had received a consignment of goods of a certain description which were to be sold at reasonable prices, or that someone had a slave for sale, or that another man kept on hand a stock of stationery and the latest books, or that such and such a ship would sail for a certain port on a certain day, and so on.

More or less space was generally used by communications. These communications were ordinarily in criticism or defence of the action of the local authorities and were usually signed by some high sounding Latin name such as Publicus, Vindex (a favorite pen name of Samuel Adams), Agricola, or something of that sort. As the Revolutionary period drew on and the political controversies ceased to be parochial and became national and international the press became the great forum of discussion.

It must be remembered that outside of a few towns the population of the colonies was very much scattered and had little or no opportunity to get together. The newspapers, however, could and did reach the more remote settlements. The fact that they came late did not greatly matter. The really important message which they had to carry was not their imperfect news but their important discussions of vital political matters. Every paper had its distinct political reason for existence as we have seen in the case of the Massachusetts Gazette and the Boston Gazette. Frankly partisan, it gave more attention to its political propaganda than to anything else. The editors of these papers with a very few exceptions are of very little importance, indeed their names are today hardly known. The newspapers were really edited by their subscribers. They were simply the vehicles through which the public men of the time and some hired political writers got their views before
the public. Edes and Gill were printers and they published a paper, but the editing was done through the communications of Samuel Adams, James Otis, John Adams, and their associates among the Boston Whigs. These editorials were mostly, as has been remarked, signed by fictitious names, but it was pretty well known who wrote them.

In spite of their small numbers, insignificant size, and to our eyes almost ridiculous appearance, these papers were tremendous powers in the community. It is not probable that the press ever in its whole history exercised a greater influence than that wielded by these rough, badly printed sheets. As pieces of printing they are about as bad as they can be. Paper, never good, became very poor during the Revolutionary period, as the best paper was imported and it became difficult to procure. The equipment of all sorts was ordinarily poor. Presses were rickety and it does not appear that the printers ever supposed a font of type to be worn out. The present writer has had occasion to make a considerable study of newspapers previous to 1750. They are always difficult to read and in some cases the type and press work are so poor that words and phrases are absolutely illegible even though the paper is well preserved. Typographical errors are very common, although there was ordinarily, one would suppose, plenty of time for the correction of the proof. Rough wood cuts appeared at the top of the first sheet of these papers and occasionally a wood cut appears to illustrate some ballad or attack in verse upon some person or organization.

One feature that is to be noticed in these old papers is their freedom of speech, amounting in some cases to positive indecency. The present writer has recently seen a photostat copy of the first page of one of the very early Boston newspapers. The leading article, so
to speak, is an attack in rhyme (it would be too complimentary to call it verse) upon certain persons, accompanied by a wood cut of the most indecent description. The rhymes are as indecent as the picture. Such a publication would not be allowed sale or circulation through the mails at this time, but at that period, although the persons assailed were very indignant, the general public seems to have taken no exception whatever to the character of the publication.

The stimulus given to newspaper publication by the pre-Revolutionary agitation by no means passed away with the winning of independence. The Americans became and have continued an intensely newspaper loving people. In 1810 Isaiah Thomas, our unfailing authority in these early matters concerning American printing, tells us that there were 359 newspapers published in the United States. His list, which is reprinted below, is interesting as showing the relative state of development of the new states and territories, and as giving us a glimpse of the great Middle West in the making. The list follows:

<table>
<thead>
<tr>
<th>State</th>
<th>Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>(8 in Maine, then part of Massachusetts.)</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>12</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>7</td>
</tr>
<tr>
<td>Connecticut</td>
<td>11</td>
</tr>
<tr>
<td>Vermont</td>
<td>14</td>
</tr>
<tr>
<td>New York</td>
<td>66</td>
</tr>
<tr>
<td>New Jersey</td>
<td>8</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>71</td>
</tr>
<tr>
<td>Delaware</td>
<td>2</td>
</tr>
<tr>
<td>Maryland</td>
<td>21</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>6</td>
</tr>
<tr>
<td>Virginia</td>
<td>23</td>
</tr>
<tr>
<td>North Carolina</td>
<td>10</td>
</tr>
<tr>
<td>South Carolina</td>
<td>10</td>
</tr>
</tbody>
</table>
According to the Encyclopedia Britannica in 1900, only ninety years later, there were 15,904 newspapers published in the United States. This includes neither magazines nor periodicals, nothing but newspapers. It is interesting to note that this is slightly more than one-half of the entire number published in the world, the total for the entire world including the United States being 31,026.

In spite of their poor workmanship and material the early newspapers were expensive and probably were not profitable as a rule. Their circulation was very limited and the cost of material and labor was high. It is hard to realize this when we read the price paid for these things, but there is nothing more misleading than cost comparisons based on money. The purchasing power of money varies greatly from time to time and true costs depend upon many factors which are often difficult to ascertain.

The period of the cheap newspaper did not begin until 1833. January 1, 1833, the New York Morning Post made its appearance at one cent a copy. The previous price of newspapers had been generally six cents. This price seems odd to us today because of the difference in the common use of coins at different periods. For a considerable period three cents was a common price for small things. A three-cent coin and a three-dollar gold piece were minted in the United States for a considerable number of years. Letter postage was
originally five cents, but it was reduced in the forties to three and continued at that rate until long after the Civil War. At the period of which we are speaking, 1833, a half-cent piece was in use. The price of these papers, therefore, was neither as odd nor as inconvenient as might appear.

The Morning Post lasted but a few weeks. On September 28th of the same year, however, the New York Daily Sun made its appearance at one cent a copy. This paper was written, edited, set up, and worked off by Benjamin Franklin Day, a journeyman printer. Even a small newspaper would appear to be a considerable undertaking for one man who was to be his own editor, compositor, proofreader, and pressman, but Day made a success of it. The paper grew, becoming one of the most influential in New York, and is still published. The price became two cents, however, at the outbreak of the Civil War.

In 1825 the first Sunday paper was published in New York. This was a Sunday paper pure and simple, not a Sunday edition of a daily paper. The daily papers did not publish Sunday editions for many years. About this period specialized papers began to appear and in time assumed great prominence in the field of journalism. The first of these papers appears to have been the New York Journal of Commerce, which began publication in 1827.

The present type of newspaper, which is too familiar to need description, was made possible by a variety of causes which the enterprise of newspaper publishers promptly turned to account. As long as the conditions of production and of news gathering remained unaltered there could be no important changes in the character of newspapers. The introduction of new methods, especially the use of new materials for paper making, greatly reduced the cost of paper.
The application of power to the press, followed by the wonderful improvements which had been made in press construction, made possible the immense increase in size and circulation which have characterized the present generation. Machine composition has not only reduced expense but has made possible an extent of production which previously was inconceivable. These three mechanical developments, abundance of cheap paper, improved presses, and machine composition, have removed the physical limits which were formerly set to newspaper production. The amount of matter which can be produced in a day and the number of copies which can be printed are now to all intents and purposes unlimited. Add to this the gathering of news by electricity, which places practically the whole world in instantaneous touch with the offices of our great newspapers, and the enormous development of advertising, and we see the two great factors, outside of the purely mechanical ones, which have contributed to the change.

It must be understood, however, that it is the advertiser who pays for the paper. The price at which the paper is sold is merely nominal. Advertising rates are based on circulation, partly upon the character of circulation and partly upon the size of it. A newspaper which is read extensively by people of means who are large buyers of expensive goods will obtain higher advertising rates than a paper of much larger circulation whose readers have for the most part much less money to spend.

The modern processes of reproduction have added greatly to the change in the appearance of newspapers. A modern daily paper is pretty extensively illustrated with pictures which are often surprisingly good, considering the haste with which they have to be produced, while large quantities of advertising
matter are printed from plates which may be used identically in a considerable number of papers.

This brief discussion of the development of the modern newspaper may be completed by a few words on the influence of the newspaper of today as compared with that of the Revolutionary period. Unquestionably the influence of the modern newspaper is very great, although its method of exercise is somewhat different from that of the previous period. With the decline of what may be called the popular editing of the newspapers came the period of great editors, covering particularly the second and third quarters of the nineteenth century. In this period there arose a group of men whose abilities and whose pronounced views attracted a great personal following. A newspaper was built around the personality of its editor. Men like Greeley, Raymond, Bowles, and Prentiss were known to conduct the editorial utterances of their papers. The paper was the expression of the editor's personality. The editorials were consequently taken seriously and exercised great influence.

When, however, a newspaper became a great business enterprise, depending less and less upon its circulation and more and more upon its advertising, the control of the paper passed from the editor's chair to the counting room. The politics of the paper were fixed by the owners. The editorials ceased to represent the views even of the men who wrote them. It is not uncommon for the most violently partisan editorials to be written by a gentleman who habitually votes with the other party and whose private opinions are directly contrary to those which he expresses in his articles. This is probably well known, and the editorial utterances of a newspaper are no longer taken with the seriousness which formerly attended them. Perhaps the most mischievously influential editorials
are those inspired by the views openly expressed by the editor-in-chief of one of the great newspaper publishing concerns which gets out a chain of papers in a number of large cities. He says that the successful and influential editor is a man who finds out what the great mass of the people want to have said and says it for them. Of course, this is intellectual prostitution and spells danger to everything that is best in American life. Unfortunately, the practice is not confined to the one man who has the hardihood to avow what others practice without confession.

The real influence of the modern newspaper, however, lies more in its selection and presentation of news than in its editorials. It is not probable that any newspaper could possibly publish all the news which comes into its editorial rooms. It must, therefore, make a choice. It chooses to publish those facts or alleged facts which will influence the minds of its readers most strongly in the direction which it wishes them to take. This selection and manipulation of facts or alleged facts is further enforced by the method of presentation. Most persons get their impression of news from the head lines. Even if the head line is not, as is sometimes the case, actually at variance with the subjoined text it is ordinarily quite possible for the headline writer to create almost any impression which he desires on the mind of the reader. He may distort facts, misrepresent their values, conceal their true bearing, and exaggerate or minimize their importance to an extent not realized by those who have not given the matter some consideration. In these ways the present influence of the press is very great, all the greater because to a very large extent its influence is concealed and subtle and not realized by the reader who is swayed by it.
CHAPTER III

SOME GREAT AMERICAN PRINTERS

BENJAMIN FRANKLIN—1706-1790

BENJAMIN FRANKLIN was born in Boston, January 17, 1706, the seventeenth and youngest child of Josiah Franklin, a soap boiler and candle maker, or tallow chandler, as he was called in those days. Little Benjamin was a precocious child, and as usual in such cases at that time, his fond parents looked forward to the ministry for him. In spite of these parental aspirations little Benjamin went to work for his father when ten years old, cutting candle wicks and filling the molds with tallow. He found no satisfaction in this work and wanted to run away to sea, as many small boys did at that time. The ministerial ambitions seem to have been lost sight of, but the boy's insatiable desire for reading and his devotion of all of his spare coppers to the buying of books made it clear that a purely mechanical occupation would never suit him. He was therefore apprenticed at twelve to his older brother James, who had learned the printing trade in England and had brought out a press. Little Ben became proficient in typesetting and, as soon as his strength permitted, in presswork. Meantime he spent all of his spare time studying and learning to write good English. He provided himself with a little ready money by printing and selling on his own account songs and ballads which he printed in broadside or chap-book form and hawked about the streets.

In 1721 James Franklin began the publication of the New England Courant. Benjamin, although only fifteen years old, smuggled in anonymous articles on
subjects of public interest. These articles attracted considerable attention and many guesses were made at their authorship, which was attributed to several prominent men of Boston. The paper practiced an independence of expression which was not pleasing to the authorities. Legal measures were taken on account of some of their publications and James Franklin got thirty days in prison. Benjamin escaped with an admonition. Henceforth the paper was published in Benjamin's name for some time.

James Franklin was not a man of pleasant personality and he was naturally disposed to attempt to suppress the precocious youngster who was at once his younger brother and his apprentice. It would not have been in accordance with human weakness for him to recognize the youngster's superiority. Feeling no longer able to get on with his brother, Benjamin ran away in 1723, confident of his ability to find work elsewhere. Failing to get occupation in New York he went to Philadelphia, where he landed with a bundle of clothing in his hand, one Dutch dollar in his pocket, and his own courage, skill, and ambition. Looking for work among printers, Franklin ran across the aged William Bradford who introduced him to a man named William Keimer who for a good many years played an important part in Franklin's life.

Keimer was a half-crazy religious enthusiast who was attempting to carry on a little printing office with an equipment consisting of one press in bad condition and a font of worn-out English (14-point). He took Franklin into his employ and conditions immediately began to improve. All the printing done in Philadelphia at this time was very poor and Franklin quickly made Keimer's shop conspicuous. He soon attracted the attention of Governor Sir William Keith. Keith was of a type only too common, a man full of super-
Poor Richard, 1733.

AN

Almanack

For the Year of Christ

1 7 3 3 ,

Being the First after LEAP YEAR.

And makes since the Creation

Year

By the Account of the Eastern Greeks 7241
By the Latin Church, when O east T 6932
By the Computation of W.M. 5742
By the Roman Chronology 4689
By the Jewish Rabbits 5494

Wherein is contained.
The Lunations, Eclipses, Judgment of
the Weather, Spring Tides, Planets Motions &
mutual Aspects, Sun and Moon's Rising and Set-
ting, Length of Days, Time of High Water,
Fairs, Courts, and observables Days.

Fitted to the Latitude of Forty Degrees,
and a Meridian of Five Hours West from London,
but may without sensible Error, serve all the ad-
joinent Places, even from Newfoundland to South-
Carolina.

By RICHARD SAUNDERS, Philom.

PHILADELPHIA:
Printed and Sold by B. FRANKLIN, at the New-
Printing-Office near the Market

Reduced facsimile of title page of Franklin's
"Poor Richard Almanack."
See page 38.
Kalendarium Pennsilvaniense,
OR,
America's Messenger.
BEING AN
ALMANACK
For the Year of Grace, 1686.

Wherein is contained both the English & Forreign
Account, the Motions of the Planets through the Signs, with
the Luminaries, Conjunctions, Aspects, Eclipses; the rising,
setting and setting of the Moon, with the time when the
pasteth by, or is with the most eminent fixed Stars: Sun rising
and setting and the time of High-Water at the City of Phi-
ladelphia, &c.

With Chronologies, and many other Notes, Rules,
and Tables, very fitting for every man to know & have; all
which is accommodated to the Longitude of the Province of
Pennsylvania, and Latitude of 40 Degr. north, with a Table
of Houles for the same, which may indifferently serve New-
England, New York, East & West Jersey, Maryland, and most
parts of Virginia.

By SAMUEL ATKINS.
Student in the Mathamatics and Astrology.

And the Stars in their Courses fought against Sefera, 1ndg. 5. 29.

Printed and Sold by William Bradford, sold also by
the Author and H. Murrey in Philadelphia, and
Philip Richards in New-York; 1685.

Reduced facsimile of title page of book printed by William
Bradford, the first printing done in Pennsylvania.
ficial enthusiasm and making all sorts of promises, but utterly irresponsible when it came to action. He offered to set Franklin up in business for himself and to give him the public printing. Franklin went to Boston and appealed to his father for financial backing. Although the Franklin family differences seem to have been reconciled and Benjamin forgiven for running away, his father refused the assistance asked on the ground that Benjamin, who was only eighteen years old, was too young to undertake business on his own account.

On Benjamin's return to Philadelphia Keith said that he himself would furnish the financial backing and urged him to go to London to buy a press and type and to pick up what information he could obtain in the London offices. Franklin accordingly started for London, being solemnly assured by Keith that letters of introduction and credit would go forward by the same ship and that he would only have to present himself to certain important people to find the way fully prepared for him. On his arrival at London Franklin soon discovered that the governor had not fulfilled a single one of these promises. There were no letters, no arrangements were made for his credit, and he was without resources excepting a small amount of money which he had brought with him.

He immediately obtained work as a compositor with a man named Palmer, one of the important London printers of the day. His efficiency commanded good wages and for a time he spent his easily earned money with great freedom. After serving Palmer as a compositor for a time he changed to another office, that of Mr. Watts, where he worked as a pressman. This he did very successfully because in addition to his skill he was tall and unusually strong. In spite of his youth, his good income, and the temptations of a
great city, Franklin had too much sturdy common sense and strength of character to become dissolute or dissipated. Always a hard worker he soon adopted the habits of economy and thrift which characterized his whole business life and laid the foundation of his prosperity.

After eighteen months in London Franklin returned to Philadelphia and looked up his old employer Keimer. He found Keimer apparently prosperous. He was occupying a better shop which was well equipped and furnished with a good stock of stationery and was employing five workmen, all of indifferent quality as craftsmen. Keimer offered Franklin employment as manager which he immediately accepted. Franklin soon found that it was Keimer's intention to use his manager's ability to get his affairs in good order and to instruct the poor workmen and then to turn him adrift. This did not disturb Franklin in the least. He had come to the realization of his own powers and he had not the slightest doubt that he would be able to come off the victor in any contest of wits with Keimer. He felt sure that when the time came for him to part with Keimer he would be able to take the greater part of the business with him, as proved to be the case. Meantime he set to work vigorously as a sort of man of all work. When Keimer fell short of sorts Franklin cast types. He made ink, did engraving, acted as warehouseman, and trained his fellow workmen. When Keimer competed successfully on a contract for making and supplying an issue of paper money for the colony of New Jersey, Franklin engraved the plates, took presses and necessary help to Burlington, New Jersey, and printed the issues.

Meantime Franklin was not forgetting his intellectual interests. In 1727 he gathered together a group
of his friends, who called themselves the Junto, for the discussion of morals, politics, and natural philosophy. This group finally developed into the American Philosophical Society.

In 1728 Franklin left Keimer and formed a partnership with Hugh Meredith, one of his fellow workmen in Keimer's shop. Meredith was a poor workman and a drunkard into the bargain, but his ambitious relatives wished to make a printer of him and were willing to back him with a small amount of capital. Franklin, of course, was the business man of the concern and production manager as well. Meredith seems to have been of very little use excepting for his power to command the capital. The next year Franklin and Meredith bought a newspaper which Keimer had been publishing and renamed it the Pennsylvania Gazette. Franklin's literary and typographical ability combined very soon made his paper the best newspaper of the time in every way and financially very successful as well.

In 1739 the firm of Meredith and Franklin was dissolved. Meredith came to the conclusion that he could never be a printer and that he could never resist the temptation of drink. Franklin was now in possession of sufficient cash and credit to buy out Meredith's interest and Meredith very sensibly sold out, went back to the farm he came from, and is heard from no more. Franklin soon received the appointment as public printer and by hard work and thrift soon placed himself in a position where he had no rival as a printer in Philadelphia excepting Andrew Bradford, who was growing old, was wealthy, and was relying for his income mainly upon a combination of the office of postmaster and the editorship of the paper, two occupations which he managed to make assist each other materially.
As Franklin's success grew he enlarged the scope of his business. In 1731 he took David Hall as a partner and continued in partnership with him until his retirement from active business. The same year he founded the Philadelphia Library, the first loaning library which was founded in this country. In 1733 he opened a branch printing office in Charleston. He put this branch in charge of a promising young journeyman who acted as resident manager. This enterprise was fairly successful and when the manager died his widow was able to buy the business. Franklin started several such enterprises, among them one in New York started in 1741 with James Parker as manager. All of these branches were run on the same plan, installing a young man as manager of the office and ultimately selling the business to him.

In 1732 Franklin began the publication of the famous Poor Richard's Almanac, which was continued until 1758 with an average circulation of 10,000 for each issue. Each issue of the Almanac contained a number of sententious sayings or proverbs and the last number to be issued contained a collection of these sayings. This collection has been reprinted more than 400 times. There are 70 editions in English, 56 in French, 11 in German, and 9 in Italian. Besides these, editions have been printed in Spanish, Danish, Swedish, Welsh, Polish, Gaelic, Russian, Bohemian, Dutch, Catalan, Chinese, Modern Greek, and in phonetic characters.

In 1749 Franklin retired from active participation in the printing business. He had made himself financially independent and had many interests which he wished for leisure to pursue. He had long been interested in science, particularly in electricity. One of the best known things about him is his famous kite experiment demonstrating the fact that lightning is nothing more than an electrical discharge. By
reason of his achievements in science he became internationally known, received the Copley medal of the Royal Society, and was given the degree of Doctor of Laws by the Universities of Oxford and Edinburgh. He also produced a number of practical inventions, among them the heater, still extensively used, known as the Franklin stove. In 1743 he projected a university which afterwards developed into the University of Pennsylvania.

Franklin was too prominent a citizen and too able a man to be allowed to pursue scholarly interests in quiet. His fellow citizens demanded his aid and that on a large scale. From this time on Franklin became more and more prominent as one of the great public men of the colonies. His later life belongs to American history and may well be read with profit. It lies outside the scope of this discussion, however, and the reader is referred to general history for its study.

Franklin’s interest in printing never failed. When many years later he came to make his will, although then one of the most famous men in the world, he began it with the words “I, Benjamin Franklin, Printer.” During his residence in London as the agent of the colonies and afterwards in France as the ambassador of the United States, he made many friends among the printers as well as in other circles. Among them were William Strahan, the Printer Royal, who was one of his most intimate friends, Baskerville, John Walter, and François Didot. Franklin was a good deal interested in Walter’s scheme for logotypes, or words and syllables, instead of letters, cast into type. Walter’s idea was that many short words could be cast on single types, that roots and terminations could be cast as wholes, and that “augmenting” syllables and other devices would make it possible to do printing with a comparatively
small number of types. While the actual number of types was reduced the number of characters was greatly increased and the system was too complex to be practical. It is claimed that it is from Franklin that Didot derived the practical ideas which enabled him to make successful application of Ged's invention of stereotyping to the practice of typography.

Franklin represented the United States at the Court of France from 1777 to 1785, and it is not too much to say that the success of the American Revolution would have been absolutely impossible had it not been for the service rendered by Franklin in this capacity, where he proved himself a diplomat of the first rank and unquestionably the greatest the United States has ever produced. During this period he maintained a private press at his residence at Passy, near Paris. It is interesting to observe that in 1779, in the middle of the Revolutionary War, Franklin bought a considerable supply of type in London. Probably there was some particular reason for this as Franklin claimed that the French type was not only cheaper but harder and more durable than the English. In 1780 he bought a supply of type in Holland and when he returned to America he had in his own words, "a great variety of fonts." These he brought home and they found their way into the printing plant of his grandson in whom he took great interest.

There is an interesting letter of Franklin extant, written in 1789, in which he complains of the poor quality of American paper, which was gray instead of white, and laments certain changes in typographical fashions. He considers it unfortunate that the old custom of capitalizing nouns generally has been given up, that the long $f$ has gone out of use, and that the use of italics has been restricted. He considered that emphasis, legibility, and even intelligibility had suf-
fered greatly by these changes. He also complains of the position of the interrogation mark, regretting that the English have not followed the Spanish custom of placing the interrogation mark at the beginning instead of at the end of a sentence. He says that it would be much more logical if attention could be called to the fact that one is reading a question at the beginning instead of at the end, where the question mark is really unnecessary because the reader has already learned from the text itself that it is a question.

Franklin died April 17, 1790, full of years and honors, thus closing a career which began in a printing office and closed in the highest positions of statesmanship. It is not without reason that Franklin has been familiarly called the patron saint of American printers.

ISAIAH THOMAS—1749-1831

The boyhood of Isaiah Thomas in its external aspects presents a type of a sort pathetically common in the second half of the eighteenth century. His father seems to have been an amiable, ineffective jack-of-all-trades. He had been by turns soldier, mariner, trader, farmer, and school master. He ended his pleasant but rather useless existence in 1752, leaving a 26-year-old widow with five children and no money. As a part of the problem of taking care of these children, who had been previously cared for by relatives, Isaiah was sent, when six years old, to live with Zachariah Fowle. Fowle was an unskillful printer who made cheap books, ballads, broadsides, and the like. He at once set little Isaiah at work setting type, although the little fellow only knew his letters and could neither read nor spell. He had promised to give the boy an education and to teach him the art of printing. How he did both will presently appear. Thomas said in later life that his early education con-
sisted of "six weeks poor schooling." In order to enable the little fellow to reach the type he was mounted on a bench 18 inches high which ran the length of a double case containing roman and italic.

The first task set this child of six was the setting up of a licentious ballad called the "Lawyer's Pedigree." It is fortunately probable that the child had very little conception of the meaning of his task. He completed the composition of this piece of work in two days. At seven years of age Thomas was formally apprenticed to Fowle. Fowle's plant at this time consisted of one rather rickety press, a 300-pound font of small pica, 200 pounds of English (14 point), and 100 pounds of double pica.

In later years Thomas used to tell an amusing story of Fowle's ignorance. It appears that an entirely illiterate barber's apprentice in Boston composed a poem on the then proposed expedition against Ticonderoga and Crown Point. Inability to read or write did not prevent composition, but it prevented writing, so the young barber dictated his poem to a friend who wrote it out and brought the manuscript to Fowle with an urgent order to print. When Fowle got to work at it he soon discovered that the manuscript did not contain a single punctuation mark from beginning to end. In this emergency Fowle was at first helpless. He knew absolutely nothing about the use of punctuation marks. The friend on whom he ordinarily relied for help in such emergencies could not be reached and the customer wanted his order. Being a man of resource, however, Fowle hunted in his stock until he found a ballad containing about the same number of lines. He set this printed ballad beside his manuscript and punctuated each line in the manuscript exactly like the corresponding line in the printed poem. The fact that the two were utterly unlike in subject,
A SPECIMEN OF ISAIAH THOMAS'S PRINTING TYPES.

Being as large and complete an ASSORTMENT as is to be met with in any one Printing-Office in AMERICA.

Chiefly MANUFACTURED by that great Artif, WILLIAM CASLON, Esq; OF LONDON.

PRINTED at WORCESTER, MASSACHUSETTS, BY ISAIAH THOMAS.

MDCCLXXXV.
THE HISTORY OF PRINTING IN AMERICA.

WITH A BIOGRAPHY OF PRINTERS, AND AN ACCOUNT OF NEWSPAPERS.

TO WHICH IS PREFIXED A CONCISE VIEW OF THE DISCOVERY AND PROGRESS OF THE ART IN OTHER PARTS OF THE WORLD.

IN TWO VOLUMES.

BY ISAIAH THOMAS PRINTER, WORCESTER, MASSACHUSETTS.

WORCESTER:
FROM THE PRESS OF ISAIAH THOMAS, JUN./ ISAAC STURTEVANT, PRINTER.

1810.

Reduced facsimile of title page of Isaiah Thomas's "History of Printing in America."
See pages 19 and 48.
treatment, and even in metre, with sentences of varying length, and the like, did not disturb the printer in the least. Thomas dryly adds that Fowle's knowledge of typography and presswork was on a level with his knowledge of punctuation.

In 1758 the situation was relieved by the coming of Samuel Draper as a partner in the concern. Draper was a good printer and a good man, and from his instruction Thomas laid the foundation of the remarkable skill in composition which he afterwards developed. Draper remained in the firm only three years and when he left Thomas, who was only twelve years old, took charge of the business. He did the composition and proofreading as best he could, while Fowle did presswork, pulling the press being a task beyond the boy's strength. One of Fowle's competitors was Thomas Fleet, who has been previously mentioned. Fleet's black boy learned to make rude wood cuts to embellish the ballads printed by his owner. This gave Fleet a great advantage, as he had the entire services of the only illustrator in Boston. Fowle, not to be outdone, had young Thomas try his hand at the same kind of work. He cut about one hundred of these rude wood blocks which he modestly said were not worse than those done by the negro. Another friend who was very helpful to young Thomas was Gamaliel Rogers. Rogers had been a very good printer, but now in his old age was keeping a little shop opposite the Old South Church on what is now Washington Street.

In spite of the difficulties and discouragements of the situation Thomas stuck to his job with Fowle for a period of ten years, until he was seventeen years old. By this time he had not only become a good printer but had managed to pick up a fairly good education. He had a strong taste for reading which he had indulged so far as opportunity offered. This meant in the later
eighteenth century the reading of good books of solid literature. The printing presses were not then pouring out a flood of periodicals, short stories, and novels, as is now the case. The only literature current which was not of a fairly permanent character was religious tracts and sermons, which could hardly be called light reading.

Thomas, at seventeen, could think straight, could write good plain English, a bit satirical at need, and make tolerable verses. He was able to put his thoughts directly into type without the intervention of manuscript. The conditions of his youth had made him older than his years and even now he was deeply tinctured with that type of political thought which a few years later was to produce the American Revolution.

In 1766 Thomas had a disagreement with Fowle and ran away to Halifax. Here he found employment with a man by the name of Henry. Henry had been a German soldier, but had somehow found his way to Halifax and became a printer. He was an extremely poor printer, as might be supposed, but he managed to make a living by publishing the Halifax Gazette and doing the public printing which he had somehow managed to secure. Thomas immediately improved the office and undertook to improve the Gazette both typographically and editorially. The result was an immediate collision with the authorities: The British authorities at Halifax were among the most conservative on this side of the Atlantic and they were by no means pleased with the Boston notions which Thomas put into the Gazette. Henry was consequently informed that he must either discharge his Yankee employee or give up the public printing.

Henry had no choice except to discharge Thomas, who went to Newburyport after an absence from
Massachusetts of seven months. He quickly found work on a newspaper and it is interesting to note that, although he had sent no word to his Boston friends of his departure from Halifax, the improvement of the newspaper which gave him employment was so marked and so characteristic that it was at once recognized that Thomas was back in Massachusetts.

After a short stay in Newburyport, Thomas returned to Boston and again worked for Fowle, with whom he had become reconciled, for a short time. Becoming restless, he wandered to various places in search of employment, going as far as Charleston, S. C., but before long he found himself back in Boston, where he entered into partnership with Fowle to publish the Massachusetts Spy, which was intended to appear three times a week, a very pretentious undertaking for those days. The Spy ran for three months, at the end of which time Thomas bought out Fowle and assumed entire direction of the paper. It appears that Fowle's plant had never been paid for although it had been in operation for nearly twenty years. Fowle had borrowed money from a friend who was content to let the debt run indefinitely provided the interest was paid. Thomas bought the plant by finding new endorsers and taking over the debt. Considering the fact that the debt represented the entire purchase price of type which had been in use nearly twenty years one would think that Thomas had made a poor bargain.

Thomas enlarged the Spy and reduced the number of issues to two a week. He ran the paper on this basis for another three months and then discontinued it and prepared for another reorganization. March 7, 1771, he began publication of the new Massachusetts Spy. It was a weekly and was the best paper in Boston. He had secured something less than 200
subscribers before issuing his first number, but with the appearance of the paper its excellence, both editorially and typographically, was immediately recognized and in less than two years he had secured the largest circulation in the state. Thomas was now twenty-two and with this initial publication of the Weekly Spy he began his real life work. In spite of Thomas's personal liberal views in politics he undertook at first to publish his paper on the principle that it should be open to all parties but influenced by none. Such an attitude, however, was impossible in Boston in 1771. The political conflict which was so soon to burst into open revolution had been growing more and more bitter for at least ten years and Thomas soon found that any Boston newspaper must be partisan.

Naturally and inevitably he threw in his lot with the Whig or patriot party. Before the end of the first year Governor Hutchinson ordered the Attorney General to prosecute Thomas, but the grand jury refused to indict him. In vain the government endeavored to scare, drive, buy, or suppress the young editor and his paper. They finally, however, succeeded in making the town too hot to hold him and on the night of April 16, 1775, the eve of the Battle of Lexington, Thomas hastily packed up his presses and type and started them in carts on the road to Worcester. He personally spent the night in helping Paul Revere to warn the people of the movement of the British troops and the next day took part in the Battle of Lexington. He had no intention, however, of serving his country as a soldier, but after the battle he followed his plant to Worcester and resumed publication of the Spy on May third. He had so distinguished himself by his activities and his leadership that he was included by name in the small group of patriots upon whose heads the British government set a price. Undoubtedly if
he had fallen into the hands of the authorities at any time during the Revolutionary War he would have been executed for high treason.

Thomas was appointed postmaster at Worcester in 1775, which was undoubtedly a much needed financial assistance. During the Revolutionary War he appears to have had a hard time to make a living by his printing and publication business. The conditions were decidedly unfavorable at best and New England suffered greatly from its partial isolation from the rest of the colonies caused by the British occupation of New York and the lower Hudson River. In 1776 Thomas made the acquaintance of Franklin, thus establishing an interesting relation between the best American printer of the early and the best one of the later eighteenth century.

After 1781 conditions improved and Thomas began to build up a very successful business. At this period the Spy was an interesting example of the best type of American journalism. It published such news as could be collected under the conditions which then prevailed, including the usual reprints of the news articles in the London papers and the better informed American papers. Communications on all sorts of subjects still formed a considerable portion of the contents and in addition to these there was a large amount of very solid matter published in serial form. In this way Thomas published the whole of Robertson's History of America and Gordon's History of the Revolution, as well as a large part of Guthrie's Geography. Thomas sold the Spy in 1801. In other hands the paper continued in existence until May 31, 1904.

As success came, Thomas added to his business book and commercial printing, publishing, and book-selling. He established branches in Boston, in Walpole, New Hampshire, and elsewhere. In this way
he built up the largest printing and publishing business in America and one of the largest in the world. At one time he operated twenty-four presses in various places, conducted five book stores in Massachusetts, one in New York City, one in Albany, and one in Baltimore, and published three newspapers and a magazine. His fame was international. A famous Frenchman, Brissot de Warville, afterward a victim of the French Revolution, while visiting the United States, went to Worcester for the express purpose of visiting Thomas, whom he characterized in his book of Travels as the "Didot of the United States."

A folio Bible, published in 1791, was one of his important undertakings and he was also the publisher of Watts's Psalms and Hymns, by far the most popular hymnal of the early nineteenth century. He published the greater part of the Bibles and hymn books used in the United States. He also did a great deal of printing for the Masonic fraternity with which he was actively connected, being Grand Master of Masons in Massachusetts in 1803, 1804, 1805, and 1809. Thomas's work was always excellent. The craftsman's ideals of his youth were never lowered, but rather lifted higher as his experience and increasing capital made it possible for him to make books as he thought they ought to be made. In the great mass of poor printing of this period it is always a relief to turn the pages of a Thomas book.

The large fortune which Mr. Thomas acquired enabled him in his later years to give attention to scholarly interests which were always dear to him. In 1810 he published a History of Printing in two volumes. That part of it which is general has, of course, been superseded by later works based upon much more extensive information than was accessible to him. That part of it, however, which relates to
printing in America is the one great source of information for the period previous to its publication. Mr. Thomas founded the Antiquarian Society in Worcester, which still exists as one of the most important societies of the kind in the United States. He gave the new society eight thousand volumes from his private library and a file of newspapers which he had kept through many years and which are now priceless, a hall, and other property to the value of $24,000, a much larger sum of money in those days than it would be now.

WILLIAM LLOYD GARRISON—1805-1879

Mr. Garrison is mentioned here not so much because of his work as a printer as because of his historical importance. He serves also as a type of a group of men who were extremely influential in the earlier development of American history. The printer-editor-publisher with a message who set up his printing press in a frontier town or in the middle of a big city and fought his fight for a political, social, or religious cause at the cost of poverty, persecution, and sometimes death is a heroic figure in American history. These men deserve notice even in this brief view of the history of American printing and they are fitly represented by Mr. Garrison.

At the age of fourteen Mr. Garrison was apprenticed as a printer in the office of the Herald in Newburyport, Massachusetts. While still an apprentice he became foreman of the shop, and displayed considerable journalistic ability. After his time was out he became editor of the Newburyport Free Press. From the beginning Mr. Garrison was an ardent reformer and his utterances soon became too reformatory to be popular. He was therefore obliged to leave the Free Press and attached himself to the editorial staff of
the National Philanthropist, of Boston, a temperance paper. In 1828 he became editor of the Journal of the Times, a newspaper which was published in Bennington, Vermont, in the interest of John Quincy Adams's unsuccessful campaign for re-election to the presidency of the United States. The paper naturally did not survive the election and in 1830 we find Mr. Garrison beginning the real work of his life as the partner of the Quaker, Benjamin Lundy, of Philadelphia, publisher of the Genius of Universal Emancipation.

Mr. Garrison found that the anti-slavery sentiment throughout the country was at a low ebb and that the opponents of slavery were divided in opinion and lacking in enthusiasm. There was altogether too much tendency to regard the question as an almost purely academic one and to abandon the hope or desire for immediate action. Mr. Garrison at once took advanced ground. He urged the immediate abolition of slavery and stirred the opponents of that institution to aggressive propaganda. His vigorous denunciation of the slave trade involved him in a breach of the laws of Maryland for which he was imprisoned, but his fine was paid by friends and he soon regained his liberty. In addition to his newspaper work he started a lecture service through which he and other friends of the cause of abolition gained a wide hearing. In 1831, after his release from his Maryland prison, he went to Boston and founded the Liberator, which he continued to publish without interruption until the close of the Civil War, in 1865, when the incorporation into the Constitution of the United States of a provision prohibiting slavery made further work for abolition unnecessary.

When Mr. Garrison started the Liberator he was his own writer, compositor, and pressman, preparing and
collecting all the copy and doing the entire work of making the paper. He headed his first issue with this statement, "I am in earnest—I will not excuse—I will not retract a single inch—and I will be heard." The vigorous work of the Liberator, of course, stirred up violent opposition. The State of Georgia offered $5,000 for his apprehension, dead or alive. He was often threatened with death and on one occasion he was dragged through the streets of Boston with a rope around his body by an angry mob who intended to hang him. He was rescued, however, by some friends and sheltered in jail under some formal charge until the matter had cooled down sufficiently for him to be safely discharged. In spite of opposition Mr. Garrison lived up to every word of his ringing inaugural, and he will always be remembered as one of the foremost and probably the most effective of champions of the liberation of the slave.

THEODORE LOW DE VINNE—1828-1914

Mr. De Vinne stands by common consent as the greatest American printer of his day. Like the others whom we have mentioned, he began work early, having been apprenticed at fourteen in the office of the Gazette, at Newbury, New York. In 1848 he went to the city of New York where he worked in several places as a printer, finally settling in the office of Francis Hart in 1850. He soon became foreman of Mr. Hart's establishment and in 1858 was admitted to a junior partnership. In 1877 Mr. Hart died. In his will he provided especially for the care of Mr. De Vinne's interest and arranged that he should be the ultimate heir of the entire business. Under the working out of this plan the business was reorganized in 1883 under the firm name of T. L. De Vinne
SOME GREAT AMERICAN PRINTERS

and Company, the partner being Mr. De Vinne's son Theodore B.

In 1908 Mr. De Vinne retired from active business and the firm was again reorganized as the De Vinne Press under the presidency of Mr. Theodore B. De Vinne. Throughout his life Mr. De Vinne cherished high conceptions of the printing art and of its possibilities. These conceptions are perhaps best expressed by his saying, "I shall not live to see it, but I hope that the time will come when the making of a good book, from the mechanical point of view, will be regarded as an achievement quite as worthy as the painting of a good picture."

Mr. De Vinne was hardly a genius, but he was well poised, sane, and normal. A man of vision, he possessed unflagging energy, mental and moral perseverance, and untiring industry in working for the realization of his visions. Always he was one of the most thorough and conscientious of craftsmen. It was these qualities of mind and spirit which gave prominence to Mr. De Vinne and significance to his work.

Perhaps the most important of his contracts was that with the house of Scribner, who did not do their own printing, whereby he undertook the printing of St. Nicholas in 1872 and that of Scribner's Monthly, afterwards the Century Magazine, in 1876. The editors of these magazines and particularly the art editor had extremely high standards and extremely high ideals as to the quality of their work, and they consequently made very heavy demands upon Mr. De Vinne. As may be supposed, Mr. De Vinne was eager to meet and even to surpass these demands and the result was the development of a technical skill not surpassed by any printer of the time. The general typographic excellence of these magazines was of very high order.
Mr. De Vinne began printing in the days of woodcut illustration. His printing of wood-cuts was not only remarkable from the standpoint of presswork but further because of his successful printing of them on cylinder presses, a feat which had heretofore been considered impossible. When the halftone process was discovered Mr. De Vinne saw its value and possibilities and at once brought his great personal skill and judgment to the solution of the practical problems relating to ink, paper, and presswork involved in its use. The first coated paper used for printing this form of illustration was made for Mr. De Vinne by the firm of S. D. Warren and Company. The results which Mr. De Vinne accomplished with these new processes astonished the world.

Mr. De Vinne further contributed to typography by the design of new letter faces of great beauty and legibility. He was a student of typography in all its aspects, historical and practical, and brought to its practice unerring taste as well as unrivaled skill. His great axiom was that printing was made to be read. The beauty of his work is the beauty of simplicity, a beauty the more striking because we find it developing in the midst of an era of the worst possible taste in printing. It was largely owing to Mr. De Vinne's influence that the over-elaboration of type and typography which characterized the middle of the nineteenth century in the United States gave way to the dignified simplicity which is now the accepted standard. Mr. De Vinne was not a maker of innovations. He won his success by the careful handling of accepted forms, building his work on approved and tested foundations.

Mr. De Vinne was too big a man to be contented with a personal success. He was always interested in the welfare of the industry as a whole. He was the
moving spirit in the organization of the New York Typothetae in 1865 and was its first secretary. From that time on we find Mr. De Vinne taking a prominent part in all organized effort so long as his strength permitted. He was interested also in the welfare of his men, who always found in him a personal friend and helper. Believing as he did that the greatest success in the industry demanded knowledge of its history and a study of the models of the old masters, and realizing the poverty of the American knowledge regarding these matters, he devoted himself assiduously to the study of the history of printing and in order to carry on his study he learned French, German, and Italian, as the materials for such study were then and to a great extent still are mainly to be found in those languages.

He began to write at a comparatively early age, in 1859, and was active in a literary way for 55 years. In this time he published over 100 titles, largely essays, but including his great Practice of Typography in four volumes. This monumental work appeared between the years of 1900 and 1904 when Mr. De Vinne was from 72 to 76 years of age, a time of life when most people lay aside severe labor whether intellectual or physical. This book is Mr. De Vinne's monument. Other printers have followed his footsteps and have learned to make books as good as those which come from the De Vinne Press, but Mr. De Vinne was not only a great craftsman and a great leader in the industry, but a great teacher of craftsmen. His history of the Invention of Printing was an important contribution to the vexed controversy regarding the invention, while that part of his work which deals directly with the practice of typography is still the highest authority on the subject and is likely to remain so for many years to come. No compositor can claim
to be well trained unless and until he has mastered the teachings of Mr. De Vinne.

WILL BRADLEY

Mr. Bradley, who has been one of the vital forces in the field of typography within the last few years, came into prominence at about the same time that William Morris was so profoundly affecting the typographic world through the products of the Kelmscott Press, in England, from 1891 to 1896. Bradley had been apprentice, journeyman, and foreman in a country printing office. His artistic inclinations led him to take up the study of art. He was successful in this and became a well known designer of posters whose striking originality caused his admirers to call him the Aubrey Beardsley of America. In 1896 he opened a print shop in Springfield, Massachusetts, from which he issued a series of unique booklets which attained great circulation and had great influence. His type faces and typography were a combination of Jenson, Caslon, and Bradley. While he used a comparatively simple type face based, as just observed, on the Jenson and Caslon models, he used a highly decorated page. These decorations extended to the use of odd and original color combinations in great variety. He was very successful in the adaptation of the typographic styles of the seventeenth and eighteenth centuries to modern work and in showing their wide applications beyond those made of the same styles by their originators. He designed a series of page decorations of various sorts which were very original in character and, being made and marketed by the type founders, had a very large sale.

In 1905 Mr. Bradley made a connection with the American Type Founders Company and attempted after a short time the introduction of a new style of
typography, especially characterized by profuse ornamentation and bearing everywhere the marks of his original genius and peculiar ideas. Very fortunately the printers generally accepted Bradley and his peculiarities only as suggestions. For a while many printers followed him and all were more or less influenced by his ideas. The influence has on the whole been good when it has not been allowed to become too strong.

The present-day style is the result of the combination of many diverse influences. Mr. Bradley and Mr. De Vinne represent the extremes, Mr. Bradley pushing ornamentation to the verge of excess and originality to the verge of extravagance, while Mr. De Vinne represents a simplicity which is dignified even to austerity. The good printer will know how to adapt his style to the condition and purpose of his work. For example, the Bradley models may be followed to advantage in booklets designed to attract attention, job work of distinction, and other products whose particular purpose is display and the attraction of attention. The De Vinne model, on the other hand, is suitable for conservative and distinguished booklets, for scientific and legal work, and indeed for bookmaking in general. As a rule the more serious the literature the more simple the typography, while lighter literature may be made attractive by the more ornamental typographical presentation. The Bradley models again are useful in editions de luxe and booklets on art and literature. There is a kind of book which is intended more as a work of art in itself than as something to be read and studied. For this work, which is perfectly legitimate, the Bradley styles are very useful.

This later period has been characterized by a return to simplicity and legibility and especially to simplicity
in type faces and in combinations of type. The fifty years from 1835 to 1885 were characterized by the utmost extravagance in these regards. The greater the number of varieties of type face and the more extreme the ornamentation employed upon a title page, a program, a menu, a business card, or the like, the better the job was considered. Pieces of printing which in their day were considered wonderful specimens of typographic art are today looked upon as ridiculous. Mr. De Vinne may be regarded as the leader in the movement to get rid of all these extravagances. Mr. Bradley may be regarded as the spokesman of a reaction which recognized that in the adjustment of manner and matter there is a place and a proper place for a more largely ornamented style providing the ornamentation is kept within the bounds of the canons of art and taste.

OTHER NOTED PRINTERS

The typography of today has so many able exponents that it is perhaps invidious to mention any by name. There are two men, however, whose work commands attention. One of these is Mr. Daniel Berkeley Updike, of the Merrymount Press of Boston. Mr. Updike is a profound student of everything that makes for artistic excellence in printing. Not confining his work to any one customer, Mr. Updike has exercised a wide influence for good in the maintenance and advancement of standards of typography. His work, as the work of a profound student and thorough craftsman combined, possesses the originality which characterizes the work of the man who is big enough to understand and assimilate what other men have done and then produce rather than imitate.

The other man who remains to be mentioned is Mr. Bruce Rogers who for a good many years had
general charge of the typography of the Riverside Press, the printing department of the great publishing firm of Houghton-Mifflin Company. Mr. Rogers, like Mr. Updike, is a profound student and a thorough craftsman. He is particularly successful in maintaining harmony and appropriateness of composition and material. Working as he does for only one publisher his influence has been somewhat different from that of Mr. Updike. Without falling into mechanical uniformity, he has impressed certain characteristics so thoroughly upon the work of Houghton-Mifflin Company that an intelligent reader even if he knows nothing about typography will recognize a Houghton-Mifflin book at sight. Its characteristic style is admirable in itself and lends itself to the entire range of publications of that house.
CHAPTER IV
THE PUBLIC PRINTING OFFICE

MANY references have already been made to the public printing, that is the printing of laws, proclamations, government advertisements, and the like, during the colonial period. This work was always used as government patronage and as a means of government control of printing offices and newspapers. The carrying on of the government printing was always a source of profit and in many cases it was so far essential to the printer’s business that he could not continue in business if deprived of it. The colonial printer frequently ran a newspaper and commonly was the local postmaster and public printer if he could get the work. This combination of things made the printer practically a public official and went far towards securing a subservient press though with notable exceptions.

At the very first session of the first Congress of the United States, in 1789, a report was received recommending that proposals be invited for “printing the laws and other proceedings.” In May, 1789, several New York printers (it must be remembered that New York was at this time the seat of government) petitioned to “be employed in the printing for Congress.” We have no information as to what became of this petition or even as to the action upon the report previously noted. Later in the year a joint resolution of the House and Senate provided for printing the acts and 700 copies of the journals of both bodies. The Secretary of the Senate and the Clerk of the House were directed to have it done and authorized to charge the expense to the contingent fund. Apparently these
officials were left free to use their own judgment in awarding the contracts.

It was not until 1794 that the government printing became sufficiently important to find place in an appropriation bill, the contingent fund having up to that time been able to take care of it. In 1801 Mr. Randolph proposed the appointment of an official printer for the House, but the proposal was not adopted, as Congress was opposed to multiplying offices. No special provision seems to have been made for the awarding of printing until 1804, from which time until 1819 the printing of the two houses was let out by contract to the lowest bidder. The system was not successful, as any intelligent printer of today would foresee. The work was poor and on account of the delays and inaccuracies which commonly occurred the method turned out to be really very expensive.

On March 3, 1819, a joint resolution was passed under the terms of which each house was to elect its own printer and the price to be paid was fixed by the same resolution. The public printing immediately became a reward for partisan journalism. As usual in such cases the qualifications were political and not professional. As every Congress had to elect its own printers the result was a constantly renewed series of political squabbles, first for the party nomination and then for the election. The first printers elected under this resolution were Gales and Seaton, publishers of the National Intelligencer, who were elected by both houses. In 1849 Congress voted to reduce the rates to be paid for the printing by 15% from the figures fixed in 1819. This was soon changed to a 10% reduction and finally, by an extra appropriation, the compensation of Gales and Seaton, who were again the public printers, was raised to the 1819 rates. The National Intelligencer was a strong, thorough-going
party organ and its proprietors had to be taken care of. In 1845 the rates were again reduced to 20% lower than those of 1819 and this time the reduction appears to have been maintained.

From 1840 to 1846 various special laws were passed dealing with the matter of government printing, some of which provided that the printing for the Supreme Court and for certain of the government departments should be done by contract. In 1846, under the presidency of James K. Polk, James Ritchie, editor of the Richmond Inquirer, was elected public printer. The administration was Democratic and the Richmond Inquirer was a leading Democratic paper. Mr. Ritchie's nomination was violently opposed within the ranks of his own party and as a result of his election the dissatisfied Democrats joined the Whigs in Congress and passed a joint resolution that all the public printing should be let out by contract again. This method again proved expensive and unsatisfactory and in 1852 an act was passed providing for the election of a public printer and the appointment of a superintendent of printing who should purchase the paper and other material used by the government. This act again fixed the prices to be paid for printing. The old quarrels over the elections were immediately renewed and this method also proved very expensive and unsatisfactory.

The public printing had now grown to the point where no one house could take care of it. The consequence was that the work had to be distributed, resulting in an entire lack of uniformity in type faces, office style, and other regards. After four years of this confusion the Senate elected Cornelius Wendell public printer in 1856. Wendell built up a large plant capable of taking care of all the public business, but he did not always get it. In 1861, in spite of the pre-
occupations of the opening Civil War, Congress bought out the Wendell plant and began to do its own printing. From that time on there were no more elections of public printers, with all the abuses which attended the system. Unfortunately, however, the government printing office was not entirely removed from politics, as the superintendent of printing was and is an official appointed by the President, with no security of tenure of office, and political considerations have undue weight in the appointment and employment of subordinates of all grades.

In March, 1861, President Lincoln appointed John Defrees of Indiana as superintendent of printing. Mr. Defrees organized and put in operation the government printing office as we now know it. Although a politician and appointed for political reasons he was a good organizer and established the office on as sound principles as were possible under the conditions. Mr. Defrees served as public printer, with intervals, until his death in 1882.

In spite of the necessary evils resulting from too close political affiliation the government printing office of the United States is now the largest and finest printing office in the world. In 1910 the plant and equipment were worth sixteen millions of dollars and the annual cost of operation was approximately six millions. During the same year the office produced 1,000 important books and pamphlets, besides innumerable small jobs such as the bills before the two Houses, circulars, letter heads, and the like. Over a million pages of printing were set up and 3,000 millions of pages printed; 700 million blanks, schedules, cards, and the like were printed, and 72 million letter heads and envelopes, with other matters in proportion. Nearly a million and a half of bound volumes were made. As an example of the resources of the printing office,
President McKinley one afternoon sent to Congress the report of the committee appointed to investigate the destruction of the battleship Maine. The next morning the report, consisting of 300 pages of type with 24 full-page illustrations and one lithograph in color, was printed and in the hands of every member of both Houses and of the press. All this work is quite distinct from the work of engraving and printing of money, bonds, and the like, which is done by another department.
CHAPTER V
SOME AMERICAN PUBLISHERS

THE history of printing in America would not be complete without brief sketches of a few of the leading publishers. The influence of the publishers upon the development of printing, particularly the printing of books, has been very important both directly and indirectly. We have seen how the influence of the Scribners affected the work of Mr. De Vinne. Other familiar instances may be found in the development of the Riverside Press as an adjunct to the firm of Houghton Mifflin Company, and the Athenæum Press as an adjunct to the firm of Ginn and Company. In several cases the publishers were themselves originally printers. The demands of the book publishers and especially of the newspaper publishers have been very influential in stimulating invention and calling for the production of the excellent printing machinery which is so important a feature of American printing.

Franklin and Thomas who, especially the latter, were leading publishers of that time have already been dealt with. Another important early firm was that of Carey, Lea and Carey. Matthew Carey, the founder of the firm, was born in Ireland in 1760. Learning the trade of printer and bookseller in his youth, he became a publisher of pamphlets, many of them of a political nature. In consequence of attacks on the government contained in these pamphlets he was obliged to flee to France, where he was employed by Franklin in his private press. Returning from France he renewed his attacks upon the government and this time was imprisoned. On his release he emigrated to the United
States and settled in Philadelphia, where he shortly began the publication of the Pennsylvania Herald, which was the first American paper to give accurate reports of legislative debates. He built up a successful business as a publisher and bookseller and in addition wrote extensively on politics and political economy. His son, Henry Charles Carey, entered the business in 1801 and became a partner in 1814. The business grew to large proportions and was very profitable, but was closed in 1835 when the younger Carey retired from active business in order to devote his whole time to the pursuit of the study of political economy.

WILLIAM WOOD AND COMPANY

This old but vigorous firm was founded in New York in 1804 by Samuel Wood, who was born in 1760. At first Mr. Wood opened a shop for the sale of books, mostly second hand, and stationery. To this he soon added a printing office and began the publication of primers and booklets for children. These were embellished by wood cuts and copper plate engravings, some of the pictures being in color. In 1817 William Wood came into the firm and began the publication of medical books, a special line of publication which the firm has successfully followed ever since. In 1863 Mr. William H. S. Wood, then head of the firm, dropped the stationery and general book business. In 1866 the firm began the publication of the Medical Record. Since 1881 the firm has confined its sales entirely to its own publications, which are medical, scientific, and educational. In 1810 Mr. Wood published the first American edition of Foxe's Book of Martyrs and secured 5,000 subscribers before publication. In 1823 the firm began the publication of Brown's English Grammar, a work which has continued to be published through many editions to the present time.
CROCKER AND BREWSTER

One of the conspicuous early Boston publishing firms was that of Crocker and Brewster. Uriel Crocker, born in 1796, was apprenticed to Samuel T. Armstrong in 1811. The next apprentice to be taken on by Armstrong was Osmyn Brewster. The two apprentices worked together until the expiration of their indentures, Crocker becoming the foreman of the shop in 1814. In 1818, when their time was out, Crocker and Brewster became partners of Armstrong and later took over the business. They carried on a large and successful business for more than fifty years. For some time they were leaders among Boston publishers, but were later overshadowed by younger firms.

WILLIAM D. TICKNOR

Another famous Boston publisher was William D. Ticknor who carried on business with various partners and under various firm names from 1832 to 1878. The best known of the Ticknor firms was that of Ticknor and Fields (James T.). The firm was noted for excellence of typography and for its liberal treatment of foreign authors before the days of international copyright.

DANIEL APPLETON

Daniel Appleton, born in 1785, was the founder of another of America's great publishing houses. Originally he was a dry goods dealer in Haverhill, Massachusetts, and in Boston. In 1825, at the age of forty, he moved to New York where he opened a dry goods store and carried in connection with it a line of imported books. The profit in the books and Mr. Appleton's greater interest in them soon resulted in his dropping the dry goods and giving sole attention to the book business. In 1835 he began the career as pub-
lisher which he and his successors have continued ever since. The business developed by the dropping of importing, jobbing, and retail book selling and the adding of printing and binding. The Appleton firm has entered the entire field of literature and has made itself prominent in several directions. It publishes very excellent reference books, such as Appleton's Encyclopedia and the Encyclopedia of American Biography. It also publishes important illustrated books, text books of various sorts, and Spanish books. Special attention has been given to this last item.

**HARPER AND BROTHERS**

This famous New York firm consisted originally of four brothers, James, born in 1795, John, in 1797, Joseph Wesley, in 1801, Fletcher, in 1806. James was apprenticed as pressman to Paul and Thomas, while John was apprenticed to a printer named Seymour as a compositor. Both young men were active and energetic, particularly John. Unlike many printers before and since who work with one eye on the clock to see how easily the day's pay may be earned, James Harper tried to see how much work he could get done in a day. In 1817 these two elder brothers opened a modest printing shop under the firm name of J. and J. Harper. The first book which they printed was an edition of Seneca's Morals. It is interesting to note that when Fletcher Harper, the last surviving brother, died in 1877, sixty years later, the firm was preparing for publication an edition of the same book. Their first publishing adventure, an edition of Locke's Essay on the Human Understanding, was made in 1818.

The firm soon made a reputation for fine printing. They were careful publishers, never making doubtful ventures. It was their habit before publishing a book to canvass the trade for orders, agreeing that if any
firm would take 100 copies they would place its imprint on the title page. If a sufficient number of orders to secure the financial success of the publication was not secured the project was dropped. The younger brothers entered the shop as boys and when sufficiently trained became members of the firm. The firm name was changed to Harper and Brothers in 1833. The brothers showed great enterprise. As an instance they were among the earliest American firms to publish the novels of Scott. When a new Scott novel appeared, they had everything in readiness, met the ship bearing the copies before it docked and rushed work at top speed. In this way Peveril of the Peak, a volume of 600 pages more or less, was published in twenty-one hours after the receipt of a copy.

By industry and enterprise the Harpers built up the largest book manufacturing business in America at that time. They were the pioneers in the publication of important magazines. Harper’s New Monthly Magazine was started in 1850. The nearest followers and imitators were the Putnams, who began Putnam’s Magazine in 1853, and the Atlantic Monthly, which was begun in 1857. Harper’s Weekly was started in 1857 and Harper’s Bazaar in 1867. Harper’s Young People was started in 1879, but discontinued in 1899. It was found that a magazine exclusively for young people had to have its subscription list constantly renewed and for this reason it was not considered wise to continue publication.

The Harpers early applied power to their presses, using horse power at first and then being among the first to make use of steam. They were among the first American firms to use electrotype plates extensively. About 1844 they published an edition of the Bible with 1,600 illustrations. This was the first large illustrated book to be printed on power presses.
On Saturday, December 10, 1853, their plant was burned out with a loss of a million dollars. Most of their plates, being in the vault, were saved. On Tuesday, the 13th, the firm issued a card informing the public that their business was going on and that they had forty-four presses working for them in New York, besides others in Philadelphia, Boston, Cambridge, and Andover. The January issue of Harper’s Magazine, being on the press, was destroyed to the last sheet of proof and the last line of copy. On January 10th the January number was issued complete in every respect, even to quantity of matter, excepting that it was without illustrations.

The firm of Harper and Brothers has always published solid literature, making a specialty of Greek and Latin texts and school books, in addition to a wide range of other important matter. For many years Harper’s Weekly was one of the most influential papers published. Its power was especially shown by the breaking of Boss Tweed. Tweed was in control of the Tammany ring which was all powerful in New York politics and through New York was very influential in the United States. The ring was supposed to be intrenched so solidly as to be able to defy all assaults, but in the two years 1870 and 1871 the influence of Harper’s Weekly, working largely through the powerful cartoons of Thomas Nast, broke up the ring completely and put its most important members in the penitentiary.

The firm was always prominent in its advocacy of international copyright.

For many years the business was carried on as a family affair. At first the brothers divided the labor in accordance with their special training and abilities and worked together with the utmost harmony, no enterprise being undertaken which was not agreed
upon by all four. As their children grew up they
entered the firm, five of the second generation and
eleven of the third becoming partners. So strictly
was the business regarded as a family matter that no
individual accounts were kept until 1859. The oldest
brother James, who was mayor of New York in 1844,
was killed by accident in 1869. This was the begin-
ning of important changes. Joseph Wesley died in less
than a year and John soon ceased active participation.
Fletcher, however, continued active until 1877. The
peculiar methods of the family seriously weakened the
financial stability of the firm. As the members died
or withdrew their capital was withdrawn, and after
the holdings of eight had thus been taken away
the capital of the firm became seriously impaired.
In 1900 it was organized as a joint stock company with
Mr. George Harvey as president, and since that time
has enjoyed a revival of prosperity.

G. P. PUTNAM AND SONS
This is another of the great American publishing
houses and like the Harper firm is especially interesting
from the personality of its founder. George P. Putnam
was born in Brunswick, Maine, in 1814. His early edu-
cation was received from his mother, who maintained
the family by keeping a school. His father was a lawyer
by profession, but on account of poor health was un-
able to practice. In 1825 he was taken into the carpet
store of John Gulliver, an uncle by marriage, to begin
his business career. The boy had an intense fondness
for reading and study, but found much difficulty in get-
ing opportunities to enjoy it. Business hours were
long in those days and a twelve-year-old boy was
doubtless pretty well tired out when the day's work
was done, and he was not permitted to indulge in
study or general reading on Sunday. Those were the
days of the Puritan Sabbath in New England. Mr. Gulliver seems to have been a very strict specimen of the Puritan type. In his eyes study or general reading on the Sabbath was regarded as a very serious sin indeed.

After remaining with Gulliver for a few years young Putnam went to New York, where he found employment as a shop boy in the shop of George W. Bleecker, a bookseller and the publisher of a small magazine. In this position he earned the munificent salary of $25.00 a year. He had probably worked for Gulliver for his board. After remaining with Bleecker for a little while he obtained employment in another shop and then, after a little, went to work for Jonathan Leavitt, a dealer in religious books, at $2.00 a week. This was shortly increased to $4.00 a week. As soon as young Putnam found himself in receipt of so large a sum as this he immediately hired a seat in church, an act which shows that the gloomy stiffness and harsh restrictions of Gulliver's Puritan household had not disturbed the young man's strong religious feelings.

During this period he devoted all of his spare moments to reading and study. At seventeen he began the compilation of a book which he called "The World's Progress," consisting of chronological tables accompanied by brief accounts of historical facts. The first edition of this book was published in 1833. Since then it has been many times reprinted. The later editions contain only the chronological tables. These are so arranged as to show the events occurring in different parts of the world at the same time in one view. The book is now known as Tabular Views of Universal History. It is the best thing of the sort in existence and is practically indispensable to serious readers of history. In 1833 Putnam became a clerk for Wiley and Long and in 1840 entered into partnership with
Wiley under the title of Wiley and Putnam, publishers and booksellers.

Mr. Putnam was another of the friends of international copyright. He never at any time published English books without arrangement with the authors, although most publishers did not hesitate to publish these pirated editions without any recognition of the author's rights. In 1837 Mr. Putnam became secretary of the first American International Copyright Association and continued active in the cause of international copyright until his death in 1872.

From 1841 to 1847 Mr. Putnam maintained and personally managed a branch office in London for the sale of American books and the purchase of English books for the American market. Mr. Putnam made many friends and did much to promote a better understanding between the two countries by this exchange of literary product. The London branch does not appear to have been very profitable, although far from being a source of loss. In 1847 Mr. Putnam returned to the United States to build up his publishing business, reinforced by the sale of English books in the United States. Not long after his return he dissolved his partnership with Wiley and set up for himself, soon building up a good business. He was the publisher for some of the best known and most popular authors of the time, such as Washington Irving, Bayard Taylor, Edgar Allen Poe, and James Russell Lowell.

In 1857 the business received a severe shock from the sudden death of a junior partner. This man was very brilliant and had been greatly trusted by Mr. Putnam in the conduct of the business. His management, however, was not wise and his death revealed a condition of affairs which made an assignment necessary. In this crisis Mr. Putnam was saved by the authors for whom he had been publishing. Mr.
Irving, whose works were more profitable at that time than those of any other American author, bought the plates of his publications and then placed them in Mr. Putnam's hands, thus laying the foundation of a new business. Taylor and some others continued their business relations with Mr. Putnam and in a few years the business was reorganized and the debts of the old concern paid in full.

Then came the outbreak of the Civil War in 1861. This was a serious blow to Mr. Putnam's business, which had hardly recovered stability after the experience through which it had passed. Mr. Putnam, therefore, accepted an appointment as Collector of Internal Revenue, under the new revenue laws made necessary by the war. He had in charge the most important district in the United States and conducted its affairs with conspicuous ability and success until his removal in 1866. Mr. Putnam was not a very worldly man and was unused to the ways of politicians, and when he was called upon by the representatives of the party in power to pay a political assessment he declined to do so, supposing in the innocence of his heart that a public servant's duty was to the public and that he need not fear disturbance so long as that duty was honestly and capably performed. He was very soon undeceived, however, for his refusal to pay the assessment had no sooner become known than he was promptly removed by order of President Johnson.

The business had been continued all this time and now that Mr. Putnam was to give his entire time to it he took his son George Haven Putnam into partnership and the firm assumed the name of George P. Putnam and Son. In 1871 another son entered the firm, and in 1872 a third son entered the business, the firm now being G. P. Putnam's Sons.
Mr. Putnam carried into his bookmaking the same characteristics of thoroughness and steadfast honesty which he manifested in all his dealings with his fellow men. He did much to raise the standards of bookmaking in the United States. The so-called artist's edition of Irving's Sketch Book, published in 1864, has been pronounced the best book made in the United States up to that time.

HENRY O. HOUGHTON

Turning our attention once more to Boston we take up the story of another of the famous printing and publishing enterprises of America. Henry O. Houghton, born in 1823, learned the printing trade in his early youth. Whether the printing trade stirred his scholarly ambitions or simply provided means for realizing them is not clear, but the young printer went to college and graduated from the University of Vermont in 1846 at the age of twenty-three. College graduates at that time and for many years after had no expectation of entering business life, and young Houghton was no exception to the rule. He turned his attention to teaching, as college graduates then so commonly did, but fortunately for American printing and publishing and probably still more fortunately for himself he failed to find a position. Something had to be done, however, and he went to Boston and became a reporter on the Boston Traveler. After a few years of newspaper life Mr. Houghton returned to his early love for the case and with a partner started a modest printing business in 1849 under the firm name of Bolles and Houghton.

In 1852 the business, now considerably increased, became the Riverside Press. In 1864, fifteen years after his entering the printing business, Mr. Houghton began his successful career as a publisher in partner-
ship with a Mr. Hurd. The firm name of Hurd and Houghton afterward became Houghton, Osgood and Company, and then became Houghton, Mifflin and Company, under which name it has been for many years one of the leading American publishing houses. In 1878 the business was increased by an arrangement under which the business of Ticknor and Fields was taken over.

The manufacturing work of the Houghton Mifflin Company is still carried on at the Riverside Press, which is controlled by the firm. Under the typographical direction of Mr. Bruce Rogers, already previously mentioned, the Riverside Press is distinguished for the high quality of its work and occupies an enviable place among the leaders of the book printing industry in the United States, with a reputation far more than national. An interesting feature of the work of the Riverside Press is the reproduction of literature of various periods. These reproductions are not made by the use of photography or any of the allied methods of reproduction. They are typographical reproductions. The old paper, type faces, illustrations, binding, all the characteristics of the old books are reproduced with very great technical skill and success in imitation. These books are published in limited editions and at high prices, but are eagerly sought by book lovers and admirers of the older styles of typography. These reproductions extend to all periods. The effort has not merely been to reproduce the best, but to reproduce characteristic specimens of the authorship and the bookmaking of the various periods. In some cases the books seem to be reproduced because of their literary contents and in some because of their typography or artistic form, but in every case the reproduction has been made as complete as possible in all respects.
CHAPTER VI

ORGANIZATION

WHEN the printing industry came into existence in the American colonies the organization of the industry as a craft guild was still in existence in Europe, but it had ceased to be vital. It subsisted because it was there and not because any special need was felt for it. For that reason the industry in America was never organized as we have seen it organized in England and France. A certain amount of governmental control and at times censorship was exercised which appears to have depended on the common law and the prevailing conceptions of government rather than upon any particular statute. The colonial magistrates and the General Court of Massachusetts in its earlier period were decidedly autocratic bodies and ruled in their several territories very much as they pleased. When, however, action was taken to prosecute printers for infraction of the regulations, they were generally brought into the court under either the law of libel or some of the laws then in force concerning disrespect to magistrates, and not under any particular laws regulating printing. As we have already seen the time came when the grand juries refused to return indictments and the trial juries refused to convict. Under these conditions printing became like other American industries, ungoverned and unorganized and its product was liable only to such restraint as could be exercised through the laws regarding the publication of libels or of indecent matter.

Of course it was inevitable that some sort of organization should take place, although for many years
it was entirely a local and temporary matter. The first journeymen printers' organization of which we have any record was formed in New York City during the Revolutionary War. The city, it will be remembered, was in the hands of the English, but the approaches to it except from the sea were in the hands of the Americans, as the English garrison held little outside the city itself. Consequently food, and particularly fuel, which at that period was wood, was scarce and high. The men complained that they could not warm and feed their families, and combined for higher wages. The combination was successful, but was not permanent. The organization was dissolved when its ends had been accomplished. From that time on however, there was a succession of organizations among the New York printers.

Similar local organizations were formed elsewhere. The objects of these organizations were the securing of higher pay, shorter hours, and more acceptable conditions of labor, the mutual aid and protection of the members, and the care of the aged and infirm.

In 1837 a national convention of printers' societies was held in Washington. The next year a national convention was held in New York at which eight societies were represented. These societies were located in New York, Philadelphia, Baltimore, Washington, Harrisburg, Mobile, New Orleans, and Cincinnati. From this time on similar conventions continued to be held until the organization of the first National Typographical Union, in 1852. The printing industry was the first trade to move to organize a general trade union to cover all the industries. In 1850, two years before the organization of the National Typographical Union, the New York Printers' Union was organized with Horace Greeley, the famous editor of the New York Tribune, as its presi-
dent. With the organization of this body on trade union principles begins the permanent organization of the New York printers.

When the National Typographical Union was organized in 1852, fourteen local organizations were represented in the convention. Owing to the temporary nature of the printers' organizations and to the difficulty of deciding the relations, for example, of the several organizations which had come and gone in the city of New York and the resulting condition of the organization, the only practical way to assign numbers to the locals composing the new National Union was by the drawing of lots. This was done with the following result:

1 Indianapolis
2 Philadelphia
3 Cincinnati
4 Albany
5 Columbus
6 New York
7 Pittsburgh
8 St. Louis
9 Buffalo
10 Louisville
11 Memphis
12 Baltimore
13 Boston
14 Harrisburg

The fourteen constituent unions thus obtained the numbers which they hold to this day. In 1869 the Canadian unions were admitted and the organization changed its name from the National to the International Typographical Union.

The organization of the employers lagged behind that of the employees very considerably. The development of manufacturing from household industries to small factories and so on to factories of ever increasing size, a process going on with little or no governmental hindrance or control, brought an era of trade warfare. Manufacturers adopted all sorts of clever methods to get the best of their competitors. Personal enmity came in and it was not an uncommon thing to send a
spy into the enemy's camp to purloin all the trade secrets on which he could lay his hands. Competition in price became so keen that all profit was eliminated. Many concerns were financially wrecked. This caused an awakening to those who were fortunate enough to survive and they began to look around for a remedy.

Until within comparatively recent years the prevailing idea of the employers has been competition, while that of the employees has been union. For many years, and to a certain extent now, the employers hesitated and feared to combine. Competition, however, was not the only problem. Along with the necessity for trade organization employers realized there was need of more efficient manufacturing methods, better understanding with their employees, a better understanding with the middle-man, the manufacturer and seller of raw materials, and a better understanding with the public. All this was true of nearly every kind of manufacturing business. It was true of the printing business, but perhaps at a later date.

Many of the first organizations among printers were probably for the purpose of social welfare, composed of both employers and employees. Sometimes they were confined to individual plants, but they occasionally extended to all printers in the community. A notable example of this is the Franklin Typographical Society of Boston, Massachusetts. The Society was organized in 1824 and is still active. It has several permanent funds contributed by persons and societies for their benevolent work and it has paid out in sick and death benefits more than $150,000.00.

The first really business organization of master printers was probably that formed in New York City in 1862, when a few leaders in the industry had a
vision of the value of co-operation as a means of making their business more profitable to themselves, and of greater service and utility to the public, and of collectively bringing about a better understanding with employees. At their preliminary meetings committees were appointed to take up various questions affecting the trade. It is evident that the question of cost was discussed because it is recorded in reports that cost prices were agreed upon and published.

A dinner was given at the St. Nicholas Hotel, February 22, 1863, at which John F. Trow presided. The new association was then and there christened the "Typothetae" and permanent officers elected. Corydon A. Alvord, became president, John W. Oliver, vice-president, Theodore L. De Vinne, secretary, R. Harmer Smith, treasurer.

The word "Typothetae" signifies type placers or type setters, and is from the Greek. This name was applied by Emperor Frederick II of Germany to the printers of that country. In 1470 he granted them a coat-of-arms, and, as nearly as can be ascertained, the design now used by the United Typothetae and Franklin Clubs of America is the same as that adopted by imperial consent 446 years ago; an eagle holding in one claw a composing stick and in the other a copyholder or visorium. A griffin holding in its claws two inking balls forms the crest. The inscription on the scroll, "Insigne Typographorum ex dono Fred. Imper. Rom.," translated into liberal English reads, "Seal of the Typographers by grant of Frederick, Roman Emperor."

The example of the New York Typothetae was followed in other cities by organizations of printers known sometimes as Typothetae, sometimes as Franklin Clubs, and sometimes by other names which grew up in other localities. The other cities active in this
early organization work among printers were Boston, Philadelphia, and Chicago.

In 1887 the several Typothetae organizations came together as the United Typothetae of America. The Franklin Clubs continued separate existence for a considerable time longer. It finally appeared, however, that it was not wise to maintain two separate national organizations with similar purposes and in some cases competitors in the same field. The two organizations were, therefore, merged into the United Typothetae and Franklin Clubs of America in 1913, the name becoming again the United Typothetae of America in 1917. Although there are other local organizations in various sections, not identified with this national association, this is the general and fairly inclusive organization of the printing industry.

The objects of the United Typothetae of America are to foster trade and commerce, to shield its members from unjust and unlawful exactions, to diffuse accurate and trustworthy information as to the standing of customers, to acquire, preserve, and disseminate information relating to the printing interests throughout the country, to produce uniformity and certainty in customs and usages of the trade, to settle differences between the members, to promote a larger and more friendly intercourse between the printers and the buying public, to lessen differences between printers by bringing them together and teaching them to know each other's characters, to arrive at mutual understandings with the employees, to devise more efficient manufacturing methods, and to maintain sales organizations of the highest character.

Obviously the compact control of the industry which we saw to be possible under medieval conditions, in which it was necessary for both the employer and his employees to be members of the trade organization, is
impossible under the voluntary system. It is probable, however, that the voluntary system has other advantages much outweighing any disadvantages which may come from lack of complete coherence in organization. Neither the employers nor the employees are as completely organized in this country as they are in England and on the continent. There are many workmen who continue to remain outside the union and many employers who prefer to remain outside the organization. The trend of affairs in the United States is distinctly in the direction of organization rather than of individualism. It now appears as if both the employers and the employees were likely to be much more thoroughly organized in future than they are at present.
CHAPTER VII

CONCLUSION

THE history of printing in America is very largely the history of the invention and improvement of machines and processes. These matters will be taken up in connection with the treatment of these machines and processes in other volumes of this series. A sketch of the development of printing machines and of type-founding in America will be found in No. 55. A few brief notes at this time may not be without interest.

For the first century and a quarter of American printing almost all the presses used were imported mainly from England. The greater part of the type used was also imported. As early as 1775, however, we find that good printing presses of the simple types then in use were being made in Philadelphia and in Hartford, Connecticut. Shortly after the beginning of the century American inventors began the long process of invention which has developed the printing press into its present wonderful efficiency.

Mr. Henry L. Bullen is authority for the statement that no Stanhope presses ever came to the United States. About 1800 a Dr. Kinsley of Connecticut, adapting and improving an idea of William Nicholson, of London, whose machine appeared in 1789, invented a cylinder press which is described at length and illustrated in Thomas's History of Printing. This press was worked by hand and was not unlike some of the modern proof presses. Thomas appears to have thought favorably of it, stating that it saved a great deal of labor and did good work. Other early American inventors, even before Kinsley's time, had attempted
improvements which attracted some attention but were not commercially successful.

The Americans have been especially leaders in the development and improvement of process printing, both in black and white and in colors. Although neither the halftone nor the color process were American inventions almost all of the vital changes in machinery for process printing were initiated in the United States. Ruling machines, which were a great advance in the production of halftones, were invented by Max Levy, of Philadelphia, about 1880. The first three-color process plates ever used were made by Frederick Ives, of Philadelphia, in 1881. Perhaps the only other invention which needs notice in this very brief summary is that of the autoplate, an apparatus for casting curved stereotype plates. This device, developed by Henry A. Wise Wood, of New York, in 1900, made possible the production of the great modern newspaper as we have it today.

**Supplementary Reading**

**Benjamin Franklin, Printer.** By John Clyde Oswald. New York, Doubleday, Page & Co.

**A History of Printing.** By Isaiah Thomas. (Out of print, but accessible in many libraries. The one great authority up to 1810.)

Files of the Inland Printer, a monthly trade paper published in Chicago, contain many valuable contributions to this discussion.

The material concerning American printers and publishers must be sought in general histories, special publications issued by the great publishing houses, memorial volumes, encyclopedia articles, trade papers, and the like. The writer knows of no general history of the subject to which the reader can be referred for a fuller treatment.
SUGGESTIONS TO STUDENTS AND INSTRUCTORS

The following questions, based on the contents of this pamphlet, are intended to serve (1) as a guide to the study of the text, (2) as an aid to the student in putting the information contained into definite statements without actually memorizing the text, (3) as a means of securing from the student a reproduction of the information in his own words.

A careful following of the questions by the reader will insure full acquaintance with every part of the text, avoiding the accidental omission of what might be of value. These primers are so condensed that nothing should be omitted.

In teaching from these books it is very important that these questions and such others as may occur to the teacher should be made the basis of frequent written work, and of final examinations.

The importance of written work cannot be overstated. It not only assures knowledge of material but the power to express that knowledge correctly and in good form.

If this written work can be submitted to the teacher in printed form it will be doubly useful.

QUESTIONS

1. How did the American colonial authorities attempt to control printing?
2. How did the industry act in the matter of self regulation?
3. How was printing introduced into the English colonies in America?
4. Who was the first American printer?
5. What were his first productions?
6. Who succeeded him?
7. How was the business managed?
8. Tell the story of Marmaduke Johnson.
9. What was the first American copyright?
10. For how long was the Cambridge press alone?
11. Where was the second press, and how was it managed?
12. When, where, and by whom was the first permanent American newspaper established?
13. What was the attitude of Virginia toward printing?
14. Tell what you can of the introduction of printing into the other colonies before 1775.
15. What do these facts show us?
16. What happened during the years just before the Revolution?
18. Give the order in which the other colonies established newspapers?
19. How many newspapers were there in the colonies when the Revolution began?
20. Where were they?
21. Describe a newspaper of the period before 1760.
22. What was the effect upon the newspapers of the political excitement of the period after 1760?
23. What can you say of the editing of these papers?
24. What can you say of their influence?
25. What can you say of them as pieces of printing?
26. What especial feature of them may be noted?
27. What was the effect of independence on the newspapers?
28. How many newspapers were published in the United States and its territories in 1810?
29. How many newspapers were published in the United States in 1900, and what proportion did they form of the world's newspapers?
30. What can you say of the price and profit of early newspapers?
31. When and where did cheap newspapers begin?
32. When, where, and how did Sunday papers begin?
33. What changes have made the present type of newspaper possible?
34. Where is the profit in newspapers?
35. What was the second type of newspaper editing?
36. What controls newspaper editing now?
37. How do the newspapers of today influence public opinion?
38. Tell the story of Benjamin Franklin up to his arrival in Philadelphia.
39. Continue the story up to his return from London.
40. Continue the story up to the separation from Meredith.
41. Continue it to the end of his active life as printer.
42. What can you say in a general way of Franklin up to this period?
43. What did Franklin do after he left the printing business?
44. Tell of his later interest in printing.
45. What did Franklin say about American printing in a letter written in 1789?
46. Give the dates of Franklin’s birth and death and a general summary of his life and work.
47. Tell the story of Isaiah Thomas’s boyhood.
48. Tell the story illustrating Fowle’s ignorance.
49. Continue the story of Thomas until his return from Halifax.
50. Continue the story to Thomas’s removal to Worcester.
51. Continue the story to the end of Thomas’s life.
52. Give the dates of Thomas’s birth and death and a general summary of his life and work.
53. Tell the story of William Lloyd Garrison.
54. Tell briefly the story of the life of Theodore L. De Vinne.
55. What was De Vinne’s conception of printing?
56. What did De Vinne do as a craftsman?
57. What was his contribution to typography?
58. What did he do for the welfare of the industry?
59. Describe his work as an author.
60. Tell about Will Bradley and his work.
61. Compare the typography of DeVinne and Bradley and indicate uses for each.
62. What are the characteristics of present-day typography as compared with that of the middle of the nineteenth century?
63. Mention two other leaders in American typography.
64. How was the public printing done before the Revolution?
65. How was it done from 1789 to 1819?
66. How was it done from 1819 to 1861?
67. What important change was then made?
68. What have American publishers had to do with printing?
69. Tell the story of the Careys.
70. Tell the story of the Wm. Wood Co.
71. Who was William D. Ticknor?
72. Tell the story of D. Appleton & Co.
73. Tell the story of the House of Harper.
74. Tell about the accomplishments of the house.
75. Tell the story of George P. Putnam.
76. Who was Henry O. Houghton and what did he do?
77. Tell the story of the attempts to organize the journeymen printers down to 1837.
78. Tell the story of organization down to 1869.
79. What are the objects of the International Typographical Union?
80. Tell the story of the organization of the employing printers.
81. What are the objects of the United Typothetae of America?
82. Where did the early American printers get type and presses?
83. What have Americans done for the development of printing?

84. In what important development of printing have Americans particularly excelled?

Note. Here, as elsewhere in the historical volumes of this series, no attempt has been made to write an exhaustive list of questions. The questions are merely intended to aid in the analysis of the text and to indicate broadly the lines of examination into the pupil's proficiency. Many other questions will suggest themselves and should be freely asked. The historical volumes afford abundant material for written work. This can be utilized for a wide range of results by having the pupil write his paper, prepare it for print, set it up, prove it, correct proof, and make a revise proof.
TYPOGRAPHIC TECHNICAL SERIES
FOR APPRENTICES

THE following list of publications, comprising the TYPOGRAPHIC
TECHNICAL SERIES FOR APPRENTICES, has been prepared under
the supervision of the Committee on Education of the United
Typothetae of America for use in trade classes, in courses of printing
instruction, and by individuals.

Each publication has been compiled by a competent author or
group of authors, and carefully edited, the purpose being to provide
the printers of the United States—employers, journeymen, and
apprentices—with a comprehensive series of handy and inexpensive
compendiums of reliable, up-to-date information upon the various
branches and specialties of the printing craft, all arranged in orderly
fashion for progressive study.

The publications of the series are of uniform size, 5 x 8 inches.
Their general make-up, in typography, illustrations, etc., has been,
as far as practicable, kept in harmony throughout. A brief synopsis
of the particular contents and other chief features of each volume will
be found under each title in the following list.

Each topic is treated in a concise manner, the aim being to em-
body in each publication as completely as possible all the rudimentary
information and essential facts necessary to an understanding of the
subject. Care has been taken to make all statements accurate and
clear, with the purpose of bringing essential information within the
understanding of beginners in the different fields of study. Wherever
practicable, simple and well-defined drawings and illustrations have
been used to assist in giving additional clearness to the text.

In order that the pamphlets may be of the greatest possible help
for use in trade-school classes and for self-instruction, each title is
accompanied by a list of Review Questions covering essential items of
the subject matter. A short Glossary of technical terms belonging to
the subject or department treated is also added to many of the books.

These are the Official Text-books of the United Typothetae of
America.

Address all orders and inquiries to COMMITTEE ON EDUCATION,
UNITED TYPOTHETAE OF AMERICA, CHICAGO, ILLINOIS, U. S. A.
PART I—Types, Tools, Machines, and Materials

1. Type: a Primer of Information  By A. A. Stewart
   Relating to the mechanical features of printing types; their sizes, font schemes, etc.; with a brief description of their manufacture. 44 pp.; illustrated; 74 review questions; glossary.

2. Compositors' Tools and Materials  By A. A. Stewart
   A primer of information about composing sticks, galleys, leads, brass rules, cutting and mitering machines, etc. 47 pp.; illustrated; 50 review questions; glossary.

3. Type Cases, Composing Room Furniture  By A. A. Stewart
   A primer of information about type cases, work stands, cabinets, case racks, galley racks, standing galleys, etc. 43 pp.; illustrated; 33 review questions; glossary.

4. Imposing Tables and Lock-up Appliances  By A. A. Stewart
   Describing the tools and materials used in locking up forms for the press, including some modern utilities for special purposes. 59 pp.; illustrated; 70 review questions; glossary.

5. Proof Presses  By A. A. Stewart
   A primer of information about the customary methods and machines for taking printers' proofs. 40 pp.; illustrated; 41 review questions; glossary.

6. Platen Printing Presses  By Daniel Baker
   A primer of information regarding the history and mechanical construction of platen printing presses, from the original hand press to the modern job press, to which is added a chapter on automatic presses of small size. 51 pp.; illustrated; 49 review questions; glossary.

7. Cylinder Printing Presses  By Herbert L. Baker
   Being a study of the mechanism and operation of the principal types of cylinder printing machines. 64 pp.; illustrated; 47 review questions; glossary.

8. Mechanical Feeders and folders  By William E. Spurrier
   The history and operation of modern feeding and folding machines; with hints on their care and adjustments. Illustrated; review questions; glossary.

9. Power for Machinery in Printing Houses  By Carl F. Scott
   A treatise on the methods of applying power to printing presses and allied machinery, with particular reference to electric drive. 53 pp.; illustrated; 69 review questions; glossary.

10. Paper Cutting Machines  By Niel Gray, Jr.
    A primer of information about paper and card trimmers, hand-lever cutters, power cutters, and other automatic machines for cutting paper. 70 pp.; illustrated; 115 review questions; glossary.

11. Printers' Rollers  By A. A. Stewart
    A primer of information about the composition, manufacture, and care of inking rollers. 46 pp.; illustrated; 61 review questions; glossary.

12. Printing Inks  By Philip Ruxton
    Their composition, properties and manufacture (reprinted by permission from Circular No. 53, United States Bureau of Standards); together with some helpful suggestions about the everyday use of printing inks by Philip Ruxton. 80 pp.; 100 review questions; glossary.
PART I (continued)—Paper and Printing Plates

13. How Paper is Made  
By William Bond Wheelwright
A primer of information about the materials and processes of manufacturing paper for printing and writing. 68 pp.; illustrated; 62 review questions; glossary.

14. Relief Engravings  
By Joseph P. Donovan
Brief history and non-technical description of modern methods of engraving: woodcut, zinc plate, halftone; kind of copy for reproduction; things to remember when ordering engravings. Illustrated; review questions; glossary.

15. Electrotyping and Stereotyping  
By Harris B. Hatch and A. A. Stewart
A primer of information about the processes of electrotyping and stereotyping. 94 pp.; illustrated; 129 review questions; glossaries.

PART II—Hand and Machine Composition

16. Typesetting  
By A. A. Stewart
A handbook for beginners, giving information about justifying, spacing, correcting, and other matters relating to typesetting. Illustrated; review questions; glossary.

17. Printers’ Proofs  
By A. A. Stewart
The methods by which they are made, marked, and corrected, with observations on proofreading. Illustrated; review questions; glossary.

18. First Steps in Job Composition  
By Camille DeVeze
Suggestions for the apprentice compositor in setting his first jobs, especially about the important little things which go to make good display in typography. 63 pp.; examples; 55 review questions; glossary.

19. General Job Composition  
How the job compositor handles business stationery, programs and miscellaneous work. Illustrated; review questions; glossary.

20. Book Composition  
By J. W. Bothwell

21. Tabular Composition  
By Robert Seaver
A study of the elementary forms of table composition, with examples of more difficult composition. 36 pp.; examples; 45 review questions.

22. Applied Arithmetic  
By E. E. Sheldon
Elementary arithmetic applied to problems of the printing trade, calculation of materials, paper weights and sizes, with standard tables and rules for computation, each subject amplified with examples and exercises. 159 pp.

23. Typecasting and Composing Machines  
A. W. Finlay, Editor
Section I—The Linotype  By L. A. Hornstein
Section II—The Monotype  By Joseph Hays
Section III—The Intertype  By Henry W. Cozzens
Section IV—Other Typecasting and Typesetting Machines  By Frank H. Smith
A brief history of typesetting machines, with descriptions of their mechanical principles and operations. Illustrated; review questions; glossary.
PART III—Imposition and Stonework

24. Locking Forms for the Job Press
   By Frank S. Henry
   Things the apprentice should know about locking up small forms, and about general work on the stone. Illustrated; review questions; glossary.

25. Preparing Forms for the Cylinder Press
   By Frank S. Henry
   Pamphlet and catalog imposition; margins; fold marks, etc. Methods of handling type forms and electrotype forms. Illustrated; review questions; glossary.

PART IV—Presswork

26. Making Ready on Platen Presses
   By T. G. McGrew
   The essential parts of a press and their functions; distinctive features of commonly used machines. Preparing the tympan, regulating the impression, underlaying and overlaying, setting gauges, and other details explained. Illustrated; review questions; glossary.

27. Cylinder Presswork
   By T. G. McGrew
   Preparing the press; adjustment of bed and cylinder, form rollers, ink fountain, grippers and delivery systems. Underlaying and overlaying; modern overlay methods. Illustrated; review questions; glossary.

28. Pressroom Hints and Helps
   By Charles L. Dunton
   Describing some practical methods of pressroom work, with directions and useful information relating to a variety of printing-press problems. 87 pp.; 176 review questions.

29. Reproductive Processes of the Graphic Arts
   By A. W. Elson
   A primer of information about the distinctive features of the relief, the intaglio, and the planographic processes of printing. 84 pp.; illustrated; 100 review questions; glossary.

PART V—Pamphlet and Book Binding

30. Pamphlet Binding
   By Bancroft L. Goodwin
   A primer of information about the various operations employed in binding pamphlets and other work in the bindery. Illustrated; review questions; glossary.

31. Book Binding
   By John J. Pleger

PART VI—Correct Literary Composition

32. Word Study and English Grammar
   By F. W. Hamilton
   A primer of information about words, their relations, and their uses. 68 pp.; 84 review questions; glossary.

33. Punctuation
   By F. W. Hamilton
   A primer of information about the marks of punctuation and their use. Both grammatically and typographically. 56 pp.; 59 review questions; glossary.

iv
PART VI (continued)—Correct Literary Composition

34. Capitals . . . . By F. W. Hamilton
A primer of information about capitalization, with some practical typographic hints as to the use of capitals. 48 pp.; 92 review questions; glossary.

35. Division of Words . . . . By F. W. Hamilton
Rules for the division of words at the ends of lines, with remarks on spelling, syllabication and pronunciation. 42 pp.; 70 review questions.

36. Compound Words . . . . By F. W. Hamilton
A study of the principles of compounding, the components of compounds, and the use of the hyphen. 34 pp.; 62 review questions.

37. Abbreviations and Signs . . . . By F. W. Hamilton
A primer of information about abbreviations and signs, with classified lists of those in most common use. 58 pp.; 32 review questions.

38. The Uses of Italic . . . . By F. W. Hamilton
A primer of information about the history and uses of italic letters. 31 pp.; 37 review questions.

39. Proofreading . . . . By Arnold Levitas
The technical phases of the proofreader’s work; reading, marking, revising, etc.; methods of handling proofs and copy. Illustrated by examples. 59 pp.; 69 review questions; glossary.

40. Preparation of Printers’ Copy . . . . By F. W. Hamilton
Suggestions for authors, editors, and all who are engaged in preparing copy for the composing room. 36 pp.; 67 review questions.

41. Printers’ Manual of Style A reference compilation of approved rules, usages, and suggestions relating to uniformity in punctuation, capitalization, abbreviations, numerals, and kindred features of composition.

42. The Printer’s Dictionary . . . . By A. A. Stewart
A handbook of definitions and miscellaneous information about various processes of printing, alphabetically arranged. Technical terms explained. Illustrated.

PART VII—Design, Color, and Lettering

43. Applied Design for Printers . . . . By Harry L. Gage
A handbook of the principles of arrangement, with brief comment on the periods of design which have most influenced printing. Treats of harmony, balance, proportion, and rhythm; motion; symmetry and variety; ornament, esthetic and symbolic. 37 illustrations; 46 review questions; glossary; bibliography.

44. Elements of Typographic Design . . . . By Harry L. Gage
Applications of the principles of decorative design. Building material of typography: paper, types, ink, decorations and illustrations. Handling of shapes. Design of complete book, treating each part. Design of commercial forms and single units. Illustrations; review questions; glossary; bibliography.
PART VII (continued)—Design, Color, and Lettering

45. Rudiments of Color in Printing
   By Harry L. Gage
   Use of color: for decoration of black and white, for broad poster effect, in combinations of two, three, or more printings with process engravings. Scientific nature of color, physical and chemical. Terms in which color may be discussed: hue, value, intensity. Diagrams in color, scales and combinations. Color theory of process engraving. Experiments with color. Illustrations in full color, and on various papers. Review questions; glossary; bibliography.

46. Lettering in Typography
   By Harry L. Gage
   Printer's use of lettering; adaptability and decorative effect. Development of historic writing and lettering and its influence on type design. Classification of general forms in lettering. Application of design to lettering. Drawing for reproduction. Fully illustrated; review questions; glossary; bibliography.

47. Typographic Design in Advertising
   By Harry L. Gage
   The printer's function in advertising. Precepts upon which advertising is based. Printer's analysis of his copy. Emphasis, legibility, attention, color. Method of studying advertising typography. Illustrations; review questions; glossary; bibliography.

48. Making Dummies and Layouts
   By Harry L. Gage

PART VIII—History of Printing

49. Books Before Typography
   By F. W. Hamilton
   A primer of information about the invention of the alphabet and the history of book-making up to the invention of movable types. 62 pp.; illustrated; 64 review questions.

50. The Invention of Typography
   By F. W. Hamilton
   A brief sketch of the invention of printing and how it came about. 64 pp.; 62 review questions.

51. History of Printing—Part I
   By F. W. Hamilton
   A primer of information about the beginnings of printing, the development of the book, the development of printers' materials, and the work of the great pioneers. 63 pp.; 55 review questions.

52. History of Printing—Part II
   By F. W. Hamilton
   A brief sketch of the economic conditions of the printing industry from 1450 to 1789, including government regulations, censorship, internal conditions and industrial relations. 94 pp.; 128 review questions.

53. Printing in England
   By F. W. Hamilton
   A short history of printing in England from Caxton to the present time. 89 pp.; 65 review questions.

54. Printing in America
   By F. W. Hamilton
   A brief sketch of the development of the newspaper, and some notes on publishers who have especially contributed to printing. 98 pp.; 84 review questions.

55. Type and Presses in America
   By F. W. Hamilton
   A brief historical sketch of the development of type casting and press building in the United States. 52 pp.; 61 review questions.
PART IX—Cost Finding and Accounting

56. Elements of Cost in Printing . . . By Henry P. Porter
   A primer of information about all the elements that contribute to the cost of printing
   and their relation to each other. Review questions. Glossary.

57. Use of a Cost System . . . . By Henry P. Porter
   The Standard Cost-Finding Forms and their uses. What they should show. How
   to utilize the information they give. Review questions. Glossary.

58. The Printer as a Merchant . . . By Henry P. Porter
   The selection and purchase of materials and supplies for printing. The relation of
   the cost of raw material and the selling price of the finished product. Review
   questions. Glossary.

   The estimator and his work; forms to use; general rules for estimating. Review
   questions. Glossary.

60. Estimating and Selling . . . . By Henry P. Porter
   An insight into the methods used in making estimates, and their relation to selling.
   Review questions. Glossary.

61. Accounting for Printers . . . . By Henry P. Porter
   A brief outline of an accounting system for printers; necessary books and accessory

PART X—Miscellaneous

   Hygiene in the printing trade; a study of conditions old and new; practical sug-
   gestions for improvement; protective appliances and rules for safety.

63. Topical Index . . . . By F. W. Hamilton
   A book of reference covering the topics treated in the Typographic Technical Series,
   alphabetically arranged.

64. Courses of Study . . . . By F. W. Hamilton
   A guidebook for teachers, with outlines and suggestions for classroom and shop work.
ACKNOWLEDGMENT

This series of Typographic Text-books is the result of the splendid co-operation of a large number of firms and individuals engaged in the printing business and its allied industries in the United States of America.

The Committee on Education of the United Typothetae of America, under whose auspices the books have been prepared and published, acknowledges its indebtedness for the generous assistance rendered by the many authors, printers, and others identified with this work.

While due acknowledgment is made on the title and copyright pages of those contributing to each book, the Committee nevertheless felt that a group list of co-operating firms would be of interest.

The following list is not complete, as it includes only those who have co-operated in the production of a portion of the volumes, constituting the first printing. As soon as the entire list of books comprising the Typographic Technical Series has been completed (which the Committee hopes will be at an early date), the full list will be printed in each volume.

The Committee also desires to acknowledge its indebtedness to the many subscribers to this Series who have patiently awaited its publication.

Committee on Education,
United Typothetae of America.

Henry P. Porter, Chairman,
E. Lawrence Fell,
A. M. Glossbrenner,
J. Clyde Oswald,
Toby Rubovits.

Frederick W. Hamilton, Education Director.
CONTRIBUTORS

For Composition and Electrotypes

ISAAC H. BLANCHARD COMPANY, New York, N.Y.
The DEVINNE PRESS, New York, N.Y.
R. R. DONNELLEY & SONS CO., Chicago, Ill.
GEO. H. ELLIS CO., Boston, Mass.
EVANS-WINTER-HEBB, Detroit, Mich.
FRANKLIN PRINTING COMPANY, Philadelphia, Pa.
F. H. GILSON COMPANY, Boston, Mass.
W. F. HALL PRINTING CO., Chicago, Ill.
The PATTESON PRESS, New York.
The PLIMPTON PRESS, Norwood, Mass.
POOLE BROS., Chicago, Ill.
The STONE PRINTING & MFG. CO., Roanoke, Va.
C. D. TRAPHAGEN, Lincoln, Neb.
The UNIVERSITY PRESS, Cambridge, Mass.

For Composition

BOSTON TYPOTHETAE SCHOOL OF PRINTING, Boston, Mass.
The KALKHOFF COMPANY, New York, N.Y.
OXFORD-PRINT, Boston, Mass.
TOBY RUBOVITS, Chicago, Ill.

For Electrotypes

BLOMGREN BROTHERS CO., Chicago, Ill.
FLOWER STEEL ELECTROTYPING CO., New York, N.Y.
C. J. PETERS & SON CO., Boston, Mass.
ROYAL ELECTROTYPIC CO., Philadelphia, Pa.
H. C. WHITCOMB & CO., Boston, Mass.

For Engravings

AMERICAN TYPE FOUNDERS CO., Boston, Mass.
C. B. COTTRELL & SONS CO., Westerly, R.I.
GOLDING MANUFACTURING CO., Franklin, Mass.
HARVARD UNIVERSITY, Cambridge, Mass.
INLAND PRINTER CO., Chicago, Ill.
LANSTON MONOTYPE MACHINE COMPANY, Philadelphia, Pa.
MERTENHALER LINTYPE COMPANY, New York, N.Y.
GEO. H. MORRILL CO., Norwood, Mass.
OSWALD PUBLISHING CO., New York, N.Y.
The PRINTING ART, Cambridge, Mass.
B. D. RISING PAPER COMPANY, Housatonic, Mass.
The VANDERCOOK PRESS, Chicago, Ill.

For Book Paper

AMERICAN WRITING PAPER CO., Holyoke, Mass.
WEST VIRGINIA PULP & PAPER CO., Mechanicville, N.Y.