

## TYPEFOUNDERS AND TYPEFOUNDING IN AMERICA.

BY WILLIAM E. LOY.

NO. VII.—GEORGE BRUCE.

GEORGE BRUCE, a younger brother of David Bruce, and jointly with him founder of the printing, stereotyping and typefounding business of D. & G. Bruce, was born in Edinburgh, Scotland, June 26, 1781. His early life was one of privation and hardship. Coming to America when a lad of fourteen, he was at first apprenticed to a bookbinder, but having a hard master, he abandoned that trade after a few months and went to learn the printers' trade with Thomas Dodson, of Philadelphia. The office was destroyed by fire in 1798, and there being at the time an epidemic of yellow fever in Philadelphia, the brothers went to New York.



GEORGE BRUCE.

The typefoundry business was begun by D. & G. Bruce at a time of great financial depression (1813), as our war with Great Britain nearly paralyzed such industries as were not distinctly in line with munitions of war or army supplies. This period of stagnation in business continued until the close of hostilities in 1815, but the industry and frugal habits of these brothers carried them forward to success. The

printing business was sold some time during 1816 to David Fanshaw and Mahlon Day. The typefoundry may be said to have been thrust upon them—first by the refusal of the typefounders to furnish them with high spaces and quads for use in their stereotype foundry, and secondly by the failure of the partnership with the Starr brothers, with whom they could not agree. The Bruces were thus compelled to conduct the business in order to protect themselves, as there was no opportunity to dispose of the typefounding materials, even at a great sacrifice. While hesitating what to do, they suffered a serious loss by having the matrices of their only complete font (a bourgeois roman) stolen. They had little doubt this was the work of some one interested in their defeat, but it only spurred them on to greater exertions and success. Neither David nor George Bruce had more than a superficial knowledge of typefounding, but George set to work at once to repair the damage, experimenting in the cutting of punches and moldmaking. In both branches he soon became proficient; but while his first attempts were naturally crude, having the artistic temperament and the critical spirit combined with a knowledge of the printer's needs, his success was soon assured.

In 1820, at the time the brothers dissolved partnership, the specimen-book of D. & G. Bruce showed a complete assortment of choice book and ornamental faces, and the foundry was somewhat in advance of the other three typefoundries then in operation in the United States. In the mechanical details of typefounding Mr. Bruce's genius found an ample field for development. Many crude methods had been handed down from generation to generation, but he was not the sort of man to follow the traditions without question. There was little system in the foundries in regard to type bodies, the caster testing his work by previously cast type. Mr. Bruce made a set of accurate steel standards for testing new molds, and later he began a study of the relations of the various bodies of type, which resulted in the adoption in his foundry in 1822 of a uniform system, based on a geometrical progression, the sizes doubling at every seventh size in any part of the series. Each size is 12.2426+ per cent larger than the size immediately below it in the entire scale. Despite his ingenuity, the system did not meet with favor, either by printers or typefounders, particularly after the use of brass rule and the combining of

different sizes of type in one line came to be used, for the difference between the sizes could not be made up by any single lead or rule, but required a separate justifying body for each interval. It was a scientifically correct system, however, but was not practical in modern job-office methods.

Mr. Bruce was the designer and cutter of many useful and beautiful faces of type. As early as 1832 his work as an artist began to attract the attention of printers, through two sizes of scripts—great primer and double small pica. Throughout his long life, at least until he reached the age of seventy-eight, he continued actively at cutting, and always on steel. His last work was probably a font of great primer Copperplate Script, the patent of which bears the date of August 10, 1858, and the delicacy and precision with which it was engraved attests his wonderful powers. To him work of this sort was an amusement—a pastime. It constituted his enjoyment, and filled up the measure of his time, besides gratifying his ambition. His death occurred in New York July 5, 1866, at the advanced age of eighty-five.

## PRINTING IN THE ICELANDIC LANGUAGE.

Through the courtesy of Mr. William Högnason, of Minnesota, Minnesota, copies of two publications in the Icelandic language have been received by THE INLAND PRINTER. One is a twelve-page pamphlet, the constitution and by-laws of the Icelandic Lutheran Synod of North America; the other *Kennarinn*, the official Sunday-school paper of the same institution, now in the third year of its existence. The latter is a sixteen-page paper, printed on a hand-cylinder press, with an edition of about one thousand. The heading is an engraved design, the name "Kennarinn" meaning "teacher." Mr. Högnason writes that the first design submitted for this heading showed what some people imagine Icelanders are, it representing a lot of Esquimaux trotting around on some snow-clad ice-bound island. It is unnecessary to say it was sent back, and one showing a teacher and pupils substituted. The type contains many accented letters, but as there were only two characters outside of the accents not found in English, it was not difficult to purchase a dress for the paper. Two or three books in the Icelandic language have been issued by the Swedenborgian Society in New York, and a paper in North Dakota published a page of matter in Icelandic about election time, but *Kennarinn* was the first in the field. Mr. G. B. Bjornson, the editor of the *Minnesota Mascot*, is the publisher of this unique sheet.

## THE COST OF PROOFREADING.

In making estimates for printing, the cost of the proof-reading is an item very frequently not taken into account. This matter is treated in a very clear and practical manner by Mr. John Randall, secretary of the London Society of Correctors of the Press, in a letter to the *Printers' Register* for December last. It is as follows:

Every one will agree that the object of Mr. Warne, in his papers on "The Principles of Estimating," is a laudable one, namely, to impress on those who have to compile estimates the necessity of including all charges likely to be entailed by the production of the work. To quote his own words in his article in the November number of the *Register*, "it is only when any and every possible item of expense has been duly estimated that the final figures for the work can be fixed up." I think, therefore, that Mr. Warne will be grateful to me for pointing out that he has seriously under-estimated the cost of one portion of production, namely, that of reading. He assumes that twenty-three compositors will be needed for five weeks, and that only one reader and one reading boy will be required for four weeks. The compositors' wages amount to £218:10s, while the reading is to be done for £10. Thus Mr. Warne allows but £4:11s per cent for the cost of reading. Moreover, as the compositors work altogether 115 weeks, and the reader but four, this is making one reader read for more than twenty-eight compositors. If Mr. Warne will make inquiries as to the relative numbers of compositors and readers in various offices, he will find that the average may be put as ten compositors to one reader. He will then see that he must nearly treble his cost of reading if he wants the work to be well done. Or the matter may be put in another way—the percentage of cost. I have been favored with information culled from the actual costs in important



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### THE BOY.

BY ZENAS HAVELOCK.

A NECESSARY evil, good enough to run errands and clean up the office, but otherwise mostly in the way. He either is loafing in out-of-the-way corners or else is teasing or plaguing the employes into frenzy, and sadly delaying matters. Even in his errands his mind is dwelling on baseball, or, worse yet, the latest "dime novel" he has been reading, consequently the messages are in general hopelessly "pied." His sweeping may be, to all appearances, thorough; but beneath the surface, under the frames, stones and other convenient places, dust, dirt and chaos.

Well, perhaps these indictments are true bills. For the sake of argument we will grant that they are. But what are you going to do about it?

The system of apprenticeship—with all its evils—certainly did much to relieve this state of affairs. The boys who were bound out until their majority were by the terms of the articles of apprenticeship to be taught their trade by their employer, usually without pay and sometimes the parents even paying for their instruction. Now, in this teaching of the trade to the boys and youths lay the whole secret of the apprenticeship system's success.

How many boys in a printing-office in these days are taught the business thoroughly? They may be apt in picking up the details and, in this way, by sheer ambition, receive a very good knowledge of the intricacies of the "art preservative." But such boys are above the average, and we are treating of the ordinary youth. Look abroad among the printers you meet; what do you see? How many really capable, all-around printers, ready to take charge of an office at a pinch, do you meet? And how many half-instructed men, with only a very poor knowledge of the business, incapable and slow, are to be found? In the majority of cases this is to be attributed to the poor instruction—or no instruction—received by them in their first days at the business.

The young mind is plastic and readily grasps the instruction, when properly presented to it; but as years go on, the ideas acquired become more fixed and the

average man finds himself moving in a groove long before he reaches middle life. Such being the case, one can readily see the evil that can be accomplished by carelessness or slovenliness in work at the early stage of a man's career. And this will almost inevitably be the result if, as a youth, he has been largely or entirely left to himself to pick up as best he may the rudiments of his business. This point needs no illustration, for we can see living examples of it on all sides of us, and without going out of our way to find them, either.

But the employer argues that the foremen have no time, in the rush of business, to look after the apprentices (using the word in its broadest sense), and that so long as the boys do the errands and other work expected of them, that is all he cares about—it is none of his affair if they do not learn the trade. Very well, let us see. Of course, if the employer is utterly selfish and cares nothing for the welfare of the trade in general, or even for the future of his own business after he has "shuffled off this mortal coil," well and good. But, if he is a progressive man, up to the times and in touch with all the problems of the century, then he must look beyond the present time and a little into the future. Boys become men—apprentices become full-fledged printers. He, as well as his coemployers, have a duty to perform which to shirk is as wrong, relatively, as to neglect the duty of citizenship and the ballot.

The future of the trade depends upon him as a unit in the general scheme, just the same as the future of the country depends upon the voters as a unit in the political whole. He can not escape his duty by arguing that others neglect their apprentices, for this is no excuse for him to do the same. Two wrongs do not make a right.

Of course, it is not meant that work should be neglected in order to teach the boy his trade, nor is this necessary. An ordinarily bright boy, with some coaching, will pick up the first steps of the business in a very short time, and then he can be cautiously worked up and instructed by degrees, by filling in his odd time with simple work that he can do as well as any one else, but in such a way as not to neglect his regular duties.





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Subscribers and others having questions they desire answered by letter or through THE INLAND PRINTER should place such queries on separate sheets of paper, and not include them in business letters intended for the subscription department. If so written they can be sent with business letters, but it is better to forward them under separate cover, marking plainly on outside of envelope the name of department under which answer is expected. Read paragraph at the beginning of each department head for particulars. Letters asking reply by mail should be accompanied by stamp. The large amount of correspondence reaching this office makes compliance with these requests absolutely necessary.

### SUBSCRIPTION RATES.

TWO DOLLARS per annum in advance; one dollar for six months in advance; sample copies, 20 cents each.

SUBSCRIPTIONS may be sent by express, draft, money order or registered letter. **WE CAN NOT USE CHECKS ON LOCAL BANKS UNLESS EXCHANGE IS ADDED;** send draft on New York or Chicago. Make all remittances free of exchange, and payable to The Inland Printer Company. Currency forwarded in unregistered letters will be at sender's risk. Postage stamps are not desirable, but if necessary to remit them, one-cent stamps are preferred.

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Furnished on application. The value of THE INLAND PRINTER as an advertising medium is unquestioned. The character of the advertisements now in its columns, and the number of them, tell the whole story. Circulation considered, it is the cheapest trade journal in the United States to advertise in. Advertisements, to insure insertion in the issue of any month, should reach this office not later than the twentieth of the month preceding.

In order to protect the interests of purchasers, advertisers of novelties, advertising devices, and all cash-with-order goods, are required to satisfy the management of this journal of their intention to honestly fulfill the offers in their advertisements, and to that end samples of the thing or things advertised must accompany the application for advertising space.

THE INLAND PRINTER reserves the right to reject any advertisement for cause.

THE INLAND PRINTER may be obtained at retail from, and subscriptions will be received by, all newsdealers and typefounders throughout the United States and Canada.

Patrons will confer a favor by sending us the names of responsible newsdealers who do not keep it on sale.

### FOREIGN AGENTS.

M. P. MCCOY, Phoenix Works, Phoenix Place, Mount Pleasant, London, W. C., England.

W. C. HORNE & SONS (Limited), 5 Torrens street, City Road, London, E. C., England.

JOHN HADDON & Co., Bouverie House, Salisbury Square, Fleet street, London, E. C., England.

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## ADVANCE IN THE SUBSCRIPTION PRICE OF THE INLAND PRINTER.

**B**EGINNING with the April number, which commences a new volume, the yearly subscription to THE INLAND PRINTER will be raised from \$2 to \$2.50, and the six months' subscription rate from \$1 to \$1.25. The postage on foreign subscriptions will remain as at present, \$1.20 per year extra. The retail price for single copies will be 25 cents. The publishers have decided upon this policy for the reason that the publication has grown so rapidly, not only in point of valuable matter and illustrations, but in actual bulk, that it is impossible to furnish it at the old figure. All subscriptions received between this date and April 1 will be entered at the old price, but any coming in after that will be placed upon our books at the new rate only. Those who are desirous of receiving the magazine for the next year at the old figure should send in subscriptions at once.

### EDITORIAL NOTES.

**T**HE man who gives us advice that agrees fully with our prejudices and passions is usually an unsafe counselor.

**A** DIRTY and disorderly stockroom is a strong evidence that the printer is not making his business pay.

**T**URNING the leaf of the new year and the new century should mark the beginning of new methods to remedy the abuses in the printing trades.

**"O**RDER is heaven's first law," and ought to be one of the cardinal principles in the art preservative of arts. The "devil" should have its spirit ground into his very substance.

**"A** HOUSE divided against itself can not stand," and so soon as employing printers and journeymen printers bring this truth home to their intelligence better things for the printing trade will appear.

**D**O not blame your employes because their wages are fixed and sure. They are organized with power to discipline those who break their agreement. Enlist their aid and adopt their organization and your profits from the public will be guaranteed also.

**W**HEN Mundella was Secretary of Industry, he had occasion to remark: "The long hours of other nations protect England against their competition on the world's markets." Americans can safely affirm: The shorter working day, together with high wages