

most serious omission in the volume, for if the reader were but referred to "Process Blocks," there he will find concise, yet complete instructions for the production of half-tone blocks from the pen of Mr. Robert Whittet. The numerous applications of photography shown in this volume is the first thing to impress one. The whole is written in an interesting way, and there is no student of photography but will find this book invaluable for reference. It is published by the Scovill & Adams Company, of New York, 60 and 62 East Eleventh street.

DESIGNERS AND ENGRAVERS OF TYPE.

BY WILLIAM E. LOY.

NO. VIII.—ALEXANDER KAY.

NEXT to the cutting of scripts, no branch of the type engraver's art calls for so much skill and delicacy as roman faces. The ordinary reader may be impressed with the pleasing effect of the printed page when set in a certain face of type, but he cannot critically distinguish the qualities which produce this effect. Some men are naturally gifted in



ALEXANDER KAY.

but it may be cultivated and made keener. Of noted American cutters none have excelled and few have equaled Alexander Kay, of Philadelphia. This gentleman was born in Edinburgh, Scotland, June 6, 1827, and after receiving a thorough education was apprenticed to a manufacturer of bookbinders' tools. In the spring of 1850 he went to London, where he placed himself under the instruction of John Skirving, who was a well-known expert in letter-cutting on steel. Among his patrons were such prominent type founders as Henry Caslon and Vincent Figgins, of London, and Stephenson, Blake & Co., of Sheffield.

Having obtained a thorough knowledge of the art, Mr. Kay began business for himself, and was meeting with success when a tempting offer of a position was received from L. Johnson & Co., of Philadelphia. With the adventurous spirit of young manhood prompting him he accepted, and he reached his new home in November, 1854, after a very stormy ocean voyage. Mr. Kay's connection with this well-known foundry continued for nearly forty years, until cataract practically deprived him of his sight. His time was given almost exclusively to the cutting of roman faces on steel, and a reference to the specimen book of the MacKellar, Smiths & Jordan branch of the American Type Founders Company will show the reader the skill and industry he possessed. Of faces shown in the specimen book mentioned he cut Agate Nos. 6, 7 and 16; Nonpareil Nos. 6, 8, 9, 10, 15 and 16; Minion Nos. 7, 8, 9, 10, 11, 12, 15 and 16; Brevier Nos. 9, 10, 11, 12, 13, 15 and 16; Bourgeois Nos. 9, 10, 11, 12, 13, 14 and 15; Long Primer Nos. 9, 12, 13 and 15; Small Pica Nos. 9, 10 and 12; Pica, Nos. 9 and 13. The foregoing romans with their italics constitute the work of an ordinary lifetime, but he cut, besides, the Binny Old Style in nonpareil, minion, brevier, bourgeois and long primer, and the ever-popular Ronaldson Old Style in nonpareil, minion, brevier, bourgeois, long primer, small pica and pica. Mr. Kay considers the Ronaldson his masterpiece, and if one can judge from its unprecedented sale and the promptness with which it was copied by other type foundries, he is undoubtedly right.

As before stated, Mr. Kay's work has been chiefly romans, old styles and their italics, but the few series of display faces are all characterized by the same careful treatment. In the same specimen book one may see his Title No. 2 in six sizes, Ronaldson Clarendon, Ronaldson Title Slope, Old Style Title, Caslon's Anglo-Saxon, the latter in five sizes. He also cut Script No. 2 in English, great primer and two-line pica. The only series

cut by him which may be classed as ornamental is Lithographic Slope, cut on steel, in six sizes from brevier to two-line small pica. The only work in soft metal, such as is now generally used by type engravers, is the old but beautiful "check lines."

Like most cutters on steel, Mr. Kay lays no claims to designing; yet the proper proportioning and forming of the roman alphabet calls for a skill which would be of the highest quality were it developed in combination with a study of ornament. He has combined with his punch cutting the engraving of dies for minting coins, and for several years he did most of this work for the Philadelphia mint.

Mr. Kay still lives in Philadelphia, an old man, it is true, but enjoying the fruits of a well-spent life. Although denied the privilege of close study of type faces by reason of his defective sight, he has not lost interest in his art, and is as enthusiastic as when, a young artisan, he came to the country of his adoption.

ERNST MORGENSTERN.

AMONG the contemporaries of THE INLAND PRINTER the *Deutscher Buch- und Steindruckerei*, conducted by Mr.

Ernst Morgenstern, is among the most progressive and beautiful in illustration and typography. Its editor and founder was born in 1851 in the small town of Ronneburg, Thuringia, where he attended the local grammar school. At fourteen he was apprenticed to the printing trade. During his apprenticeship of four years he made use of evenings to further improve his knowledge, and more especially devoted attention to a study of foreign languages. On the expiration of his period of apprenticeship he passed the "Einjährig Freiwilligen" examination, and entered the army, three months before the Franco-German War broke out. He fought at the battles of Beaumont, Sedan, Mont-Valérien; was lying before Paris from September to January; then went to St. Quentin, where he was involved in the three days' battle, and afterward returned to Paris. Before the victorious entrance to Paris with the Emperor William, his regiment had to leave this place and to march to the south of France, there lying until peace was signed.

On returning home, Mr. Morgenstern left the army and took a situation as compositor at Leipsic, but, obtaining better terms, he soon transferred his services to the Royal Printing Office at Berlin, here obtaining his first impressions of a large printing establishment. In the spring of 1873 he took a fancy to seek further experience by traveling; and, leaving Berlin, journeyed through Saxony and Thuringia, and up the Rhine to Strasburg and Metz, taking a situation at each of these places for a couple of months. Then, recommencing his travels, he visited Paris, Orleans, Lyons, Chambéry, Aosta, Turin, Florence, Milan; and after traversing the Splügen and visiting Geneva, Neuchatel, La Chaux de Fonds, Berne and Munich, he returned to Berlin, and again took up a situation at the "Imperial Office"—the title now conferred upon the old Prussian Royal Printing Office. Resting for awhile, he worked hard in his leisure hours to acquire an acquaintance with the English language, and, succeeding, again made a move. This time he left for London. There he first found a situation at the British and foreign printing office of Messrs. Wertheimer, Lea & Co., remaining there about ten months, and then accepted a position as reader for foreign work at Messrs. Charles Skipper & East's. He remained for three years in England, and will always remember the assistance he received among fellow-craftsmen there. Returning to Berlin in 1879, he accepted the German and Austrian agency for the well-known printing ink and oil manufacturers, A. B. Fleming & Co., Ltd., who have always liberally assisted him in his progressive endeavors.

Having arrived so far, he has carried out a long-cherished hope to give German printers a worthy review representing the arts of Gutenberg and Senefelder, into which he carries his remarkable energy, taste and resource.

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ALUMINUM IN THE GRAPHIC ARTS.*

NO. 1.—BY PROF. W. E. WOODBURY, F.R.P.S.



EVER since the invention of the art of lithography -- that is, during almost a whole century -- efforts have been made to find a handier material in place of the ponderous and fragile stone. Recently this want has made itself felt more and more, as, in consequence of the rapid printing process, and the large dimensions required therefor, large stones of good quality have become scarcer and more expensive in the quarries of Solenheimer -- the only place where lithographic stones are found. Besides this, there is at all times, notwithstanding the minutest care, continual

with this metal trials have been made with polished and oxidized plates; and later, with such plates that had a coating on the surface similar to the matter on the surface of the lithographic stones. Polished and oxidized plates have not proven very successful, but with the coated plates, better results have been obtained. Notwithstanding the tremendous advantages of the zinc plates over stones, the former have had proportionately little practical use. The main reason for this is, that aside from the technical advantages which always appear with the use of the zinc plates, the average results cannot be compared with those when stones are used, if in the use of the latter the same care and attention are exercised. For this reason zinc is at present only used



FROM A DIRECT PRINT ON ALUMINUM.

danger of breaking these stones during printing -- sometimes through the slightest causes -- which calamity entails considerable loss of time and labor, besides the original cost.

Among all metals -- other materials never received any consideration -- utilized as substitutes for stones, zinc has, until recently, shown the best results; and

* Translated from *Das Atelier des Photographen*.

in lithography for ordinary work requiring plates of large dimensions.

The question to the lithographer for a suitable substitute has recently been brought nearer to a solution, and that is by a process which consists mainly of the use of thin, more or less grained aluminum plates, in place of the lithographic stones and the different varieties of zinc plates. This process -- of which Joseph