

# SHARE YOUR KNOWLEDGE REVIEW

Official Monthly Publication of

INTERNATIONAL ASSOCIATION of PRINTING HOUSE CRAFTSMEN, Inc.

Edited by

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## President Curry Predicts Great Convention

MAKE your plans now to attend the 17th Annual Convention of the International Association of Printing House Craftsmen, Inc., to be held in the city of Minneapolis, Minn., on August 9, 10, 11 and 12, 1936. If you had been privileged to be present with me at the Hotel Radisson, Minneapolis, on Saturday, January 18th, to witness the efficiency of the organization developed by Roy Brewer, general Convention chairman, and Clarence A. Groettum, president of the Minneapolis Club, you would be just as enthusiastic as I am in predicting that the next annual Convention will be one of the greatest events in the history of the Craftsmen's movement. The members of the Minneapolis and St. Paul clubs who are co-operating in the promotion of the Convention, have demonstrated to my satisfaction and to the satisfaction of Educational Commissioner DeWitt A. Patterson that not only are they capable of organizing and promoting an exceptional Convention, but also they radiate with a spirit of hospitality which may be equalled but never excelled.

### Plans for Our Next Annual Convention

The trip to Minneapolis to discuss plans for the next annual Convention was an event which I shall never forget. When the train arrived in Chicago on Friday night, I was met by a large delegation of Chicago Craftsmen who escorted me to the Chicago Athletic Club where a dinner was held with Representative-at-Large Leo A. McShane as host and the officers and leaders of the Chicago Club in attendance. From Chicago I was accompanied by DeWitt A. Patterson to Minneapolis where we were cordially welcomed at the station by a group of Minneapolis and St. Paul Craftsmen who immediately made us feel at home, and after we were in their midst a short time we realized that here in the extremely cold north Middle West was to be found real and genuine hospitality.

The first great surprise came when we were assembled to discuss plans for the Convention. General Convention Chairman Brewer, after brief introductory remarks and a general summation of the work already completed, turned over to me a typewritten report of the complete plans for the Convention, consisting of 32 pages, completely bound, which is to be presented to the International board for approval. When the Convention plans are published I am confident every Craftsman will receive the same anticipatory thrill of pleasure to come that I experienced,

## Notes on the History of the Ludlow

By DOUGLAS C. McMURTRIE

Director of Typography, Ludlow Typograph Company

THE Ludlow originally derived its name from Washington I. Ludlow, who brought to the late William A. Reade the conception of a typesetting machine entirely different in principle and purpose from that now bearing the Ludlow name. Mr. Reade in 1906 formed the Ludlow Typograph Company to develop the idea.

The original idea called for a machine provided with a set of matrix bars, approximately two feet long, each of which carried the entire alphabet, points, and figures. These bars were wedge-shaped, the wide letters being on the wide part, with the progressively narrower letters following in order as the thinner end of the bar was approached. When each bar was positioned with the desired character in each instance over the mold the line was cast. This machine was intended for use as a body matter machine for small newspapers which could not afford to buy, maintain, or operate a more expensive and intricate keyboard machine. It set 8-, 10- and 12-point matter only. Production would admittedly be less than with the more elaborate machines then in existence but worries regarding shortage of type or type replacements would be obviated entirely, and there would be the advantage of simplicity of mechanism and of operation.

In spite of many difficulties encountered, particularly in making the matrix bars, this machine was brought successfully to completion. The first five machines of this type were built during 1909, but it soon became evident that the idea as originally conceived was not commercially attractive. Meanwhile, during this experimental period, Mr. Reade had become convinced of the existence of a great need in the composing room for equipment to produce display and job composition in some more effective way than was then available.

Making a fresh start, he conceived the idea of setting lines of individual matrices by hand directly from copy and casting slug lines therefrom with simple and therefore flexible mechanism. This constitutes the essence of the Ludlow system as it operates today, which bears no resemblance to the device the company was originally formed to develop. The first individual matrices, which were engraved, were set publicly in January, 1911. This was the real start of the present organization, and the enterprise being now on the right track, progress was steady and sure.

The casting mechanism was redesigned and 20 machines were built during 1911. But it soon became evident that the real task was not to make machines, but to provide an adequate variety of matrices. Newspapers to which attention was first directed, would not and could not use a system for which matrices were available in but a few point sizes and type styles.

The manufacture in quantity of matrices in such large point sizes proved a problem of no mean proportions, the like of which had never been encountered before. Type foundries were under necessity of providing only one matrix for any given

character, whereas with the Ludlow there was requisite a method of manufacturing matrices of any letter by the thousands. The type foundry could engrave directly, at small expense, the single matrix they required, while it was evident that to produce large matrices in quantity they would have to be driven.

No machines were available for this purpose, so the company had to design and build its own presses. These embodied many new ideas and the excellence of these presses has contributed greatly to the accuracy of Ludlow matrices and—in consequence—to the success of the Ludlow system. A great deal of other special machinery also had to be designed and built.

From the beginning in 1909, Arthur H. Hedly, now president of the Ludlow Typograph Company, has been in charge of all manufacturing operations. Philip P. Merrill, vice-president and general manager, who became actively connected with the company in 1920, also has been responsible for important improvements in the Ludlow system of composition, as well as for the promotion and distribution of the company's products.

Early in 1912 fonts of single matrices for 36-point Caslon Bold were produced, and late in 1913 matrices for 24-point Caslon Light were completed. The italic matrices were on sloping bodies, a distinctive Ludlow feature.

In August, 1913, the first machine embodying the new and successful Ludlow principle was installed in a daily newspaper composing room by the *Chicago Evening Post*. This paper was a most satisfied user. In 1914, a two-machine equipment was placed in the composing room of the *Cleveland Press*, proving a success from the start. This was the first plant to approach entire slug make-up of the paper, a practice which is now encountered frequently.

In 1916 the first building in the group now owned and occupied by the Ludlow Typograph Company was leased as a factory. The general offices were still in Cleveland, and a Chicago office was maintained in the Peoples Gas Building. The following year an arrangement was effected with the Mergenthaler Linotype Company whereby that organization would handle the sales of Ludlow equipment. Sales were handled according to this plan until January 1, 1919, when the Ludlow Company terminated its arrangement with the Mergenthaler Company and organized its own force of sales and service field representatives.

Early in the development of the Ludlow system it became apparent that its potential advantages were applicable to production not only in newspaper composing rooms but in composing rooms of commercial printers as well.

In 1918 the first Ludlow installation in a plant devoted exclusively to producing general commercial job printing was made by Saul Brothers, at Chicago.

As the Ludlow system became generally accepted by printing plants, further attention was given to increasing its usefulness to the commercial printer. Blank forms had been produced on other line casting machines before 1923, but because of mechanical limitations the idea of casting and making up blank forms from slugs was not developed to any appreciable extent.

Early in 1923, Mr. Merrill conceived the tongue and socket idea of the Ludlow slug-aligning matrix, and Ludlow ruleform matrices were first produced. This principle of holding the slugs in accurate vertical alignment with each other obviously requires the direct aligning of the heads of the slugs. Accomplishing this exactly is the function of the Ludlow slug-aligning matrices by which such accurate vertical alignment is secured that down rules appear in print as a continuous line, even though actually made up of a number of units on individual slugs.

This slug-aligning method has established for Ludlow ruleforms a new and higher standard often referred to as "wax plate quality," although produced at a fraction of the time and cost of wax plates.

The real idea upon which the Ludlow ruleform matrix rests is, of course, the slug-aligning matrix, but this idea would not be effective in practice if the intersector and other ruleform matrices were not made to an accuracy allowing practically no tolerance. To hold them to the extreme precision required, and to insure absolute perpendicularity of the slug-head walls, all such ruleform matrices are of special composite construction, with the ruleface cut (rather than driven) in small pieces inserted accurately into the matrix body. The production of such matrices requires extraordinary precision in every operation.

In 1920 arrangements were effected whereby the Ludlow Typograph Company undertook the manufacture and sale of the Elrod lead-, slug- and rule-caster. At first these machines were offered only with gas-heated crucibles, but in 1929, after extensive experimentation, an electrically-heated model, as well as a new gas-heated model, redesigned and improved in many particulars, was placed on the market. The range in size of the Elrod product was increased, to cast strips from 1 to 36 points in thickness.

During the last ten years, the principal task before the company has been the production of Ludlow matrices comprising an adequate assortment of type faces to meet any reasonable requirement of printers and publishers.

Within the last few years, production tools insuring even greater precision in the product have been developed and put into use, to effect constant improvement in the quality and accuracy of the matrices, upon which both the quality of the printed product and the ease of makeready so largely depend. Great progress has also been made in perfecting the mechanical efficiency of the casting machine, effecting constant betterment of the slugs produced. The Ludlow now delivers composition of a quality adequate for printing of the highest standards.

After going through the seemingly endless job of producing the standard faces demanded by its users, the Ludlow organization embarked on a program of original type design. The present Ludlow type face specimen book shows the extent of their achievement in matrix-making, starting from scratch only a few years ago.

Among the many notable type faces of original design first produced by the Ludlow organization may be mentioned Umbra, a three-dimensional letter which has inspired the production of similar faces by a number of type foundries; Mandate,



the first continuous or joining script to be produced for casting on slugs; Ultra Modern, the first really modern type face brought out in America by any composing machine manufacturer; the Nicolas Jenson family, a fine reinterpretation of the types of the Venetian master printer; Garamond, a faithful recutting of the original types of Claude Garamond; the Stellar family, the first modern sans serif type face to be offered on the American market in matrices for composition; Delphian, a fine series of classic capitals, and Eden, a distinguished tall and slender design with flat serifs.

The fundamental rightness of the Ludlow principle of hand-set, slug-cast job and display composition has been widely recognized and the American-made Ludlow is now extensively used by printers and publishers throughout the world.



## TORONTO

### Offset Methods Discussed by Expert

Offset and its related subjects always draw a large attendance at the meetings of Toronto Craftsmen. The meeting of January 22nd, with Mr. William C. Huebner, engineering counsel, Lanston Monotype Machine Company, Philadelphia, as speaker, was no exception, thus showing the fascination that the offset-planographic processes have for printers generally.

Mr. Huebner took as his subject "Modern Planographic Plate-Making Methods" and stated that there was of late a greatly awakened interest in offset printing methods, yet photo-composing was not new. The speaker instanced the fact that the Stone Company in Toronto were using this method 23 years ago and are still using the same equipment and producing high class work. Many printers are going into planographic methods of printing, said the speaker, but there would always be a good proportion of printing done by letterpress methods.

Mr. Huebner brought with him a large range of samples of work done by the various methods of planographic printing, which illustrated in a very convincing way the wonderful strides being made in this field.

This was the first meeting of the new year with the new officers in charge. The retiring officers gave reports on the work of the past year, which showed that 1935 had been a most profitable year in every way, with the interest well maintained.

The members of the club took the opportunity of expressing to Jules Boettger, the retiring president, their sincere appreciation of the way he had conducted the affairs of the

club during the past two years by presenting him with a silver tea service. He graciously thanked them for their thoughtfulness and for loyalty to the club while he was president.

The Toronto Club is taking up work in the technical schools by having displays of printing at each school and also providing speakers to give lectures. During the past month Oliver Watson, superintendent of Bridgen's Limited, gave instructive talks in the various schools. The principals and teachers, as well as the students, are very appreciative of the educational work the club is doing.

—J. P. RIDCHESTER



## But the Greatest of These Is Precision

In a printing press of character abide these qualities:

Precision of construction in its metal parts. Rigidity and strength so that it will hold the line regardless of the size and solidity of form.

And with these qualities the press must be supplied with a smooth, tight tympan in tune with the form, inking rollers properly set and in tune with the atmospheric conditions and ink that knows the paper on which it is to be deposited.

For, given all strength and rigidity in its metal parts, without precision in construction, the press will steal the time of craftsmen.

For, given all that can be put into tympan, inking rollers, rollers and makeready, without precision construction the press is a thief that takes away the pride of craftsmanship.

—R. O. VANDERCOOK.

## Achievement

By EDWARD DeWITT TAYLOR (San Francisco)

He builds his temple on the shifting sand  
Who holds no toil-worn hand within his own;  
A portless mariner, by Fate's wind blown,  
He wrecks his ship on Failure's deadly land.  
Who has not high ideals at his command  
Knows not Creation's joy, nor can enthrone  
The Mind's high Majesty, but walks alone,  
Nor feels the rapture born of Work's demand.

Then do the thing which Life ordains for thee  
For its own sake, and set thy spirit free  
From all that holds thee to the lesser thought;  
Make of thy task a shrine, and kneeling there  
Lift to thine eye the thing thy hand hath wrought,  
And in thy Soul breathe deep Achievement's air.



### Club Directory Changes

**BOSTON Club of Printing House Craftsmen**—Meets third or fourth Mondays • Joseph W. Kearny, president, Oxford Print, 531 Commonwealth Ave., Boston, Mass. • Fred A. Williams, secretary-treasurer, 394 Atlantic Ave. • Paul Crudden, editor *Boston Craftsmen's Bulletin*, 19 Vinal St., Brighton, Mass. • Philip J. McAteer, educational chairman, 470 Atlantic Ave.

**BUFFALO Club of Printing House Craftsmen**—Meets third Thursdays • Arthur Manhardt, president, 33 East Huron St. • John C. Heinicke, secretary-treasurer, 189 Kingsley St. • Ralph Gilbert, educational chairman, 45 Carroll St.

**CHICAGO Club of Printing House Craftsmen**—Meets third Tuesdays • De Witt A. Patterson, president, 340 West Huron St. • Jack L. Hagen, secretary, 1200 West Monroe St. • S. B. Hammer, educational chairman, 11340 South Union St. • Craig R. Spicher, vice-chairman educational committee, 1354 South Damen Ave.

**CLEVELAND Club of Printing House Craftsmen**—Meets third Thursdays • John Knox, president, c/o The Caxton Company • Charles Kuehn, secretary, 643 East 118th St. • John Deering, editor *The Cleveland Craftsman*, 1919 East 19th St. • J. Homer Winkler, educational chairman, 1459 Superior Ave.

**MONTREAL Club of Printing House Craftsmen**—Meets third Mondays • A. T. Metcalfe, president, Metcalfe-Robinson Press, Ltd., 1878 La Salle Blvd. • Karl C. Baker, secretary-treasurer, 6163 Notre Dame East • Leonard R. Barker, editor *The Montreal Craftsman*, 1187 Bleury St. • R. E. Beattie, educational chairman.

**OMAHA Club of Printing House Craftsmen**—Meets third Thursdays, at Elks Club • William Brisbin, president • W. J. Scott, secretary-treasurer, 5403 Papillon Ave. • Lou F. Long, educational chairman, 1114 Harvey St.

**ST. LOUIS Club of Printing House Craftsmen**—Meets second Wednesdays at Jefferson Hotel • Paul H. Schulze, president, c/o Bechhold Co., 210 Pine St. • Carl E. Dyer, secretary-treasurer, care San-Dei Print-

ing Co., 603 Gratiot St. • George Braznell, educational chairman, 503 North Second St.

**WORCESTER County Club of Printing House Craftsmen**—Ernest W. Hall, president, Box 121, Sturbridge, Mass. • Charles W. Kellogg, secretary, Worcester Girls' Trade School, Worcester, Mass. • Harold E. King, educational chairman, 44 Portland St., Worcester, Mass.

### Contents of This Issue

	Page
President's Pages . . . . .	1-3
Retouching for Photogravure . . . . .	4-5
BY JOHN T. BARLOW	
Over the Secretary's Desk . . . . .	6
Efficiency Methods in the Pressroom . . . . .	7-8
BY W. W. HITCHNER	
More Light on the Roller Problem . . . . .	8-9
BY WILLIAM F. SQUIER	
Composing Room Section . . . . .	9-14
CONDUCTED BY WALTER F. SCHULTZ	
Notes on the History of the Ludlow . . . . .	15-18
BY DOUGLAS C. MC MURTEE	
The Miller Printing Machinery Company and Its Products . . . . .	19-21
BY WILLIAM M. KEMP	
Minneapolis Leaders . . . . .	22-23
CRAFTSMEN BREWER AND GROTHUM	
History of the International Association of Printing House Craftsmen, Inc. . . . .	25-28
BY HARVEY H. WEBER	
Apprenticeship of Benjamin Franklin . . . . .	29-31
BY DOUGLAS C. MC MURTEE	
Local Club Correspondence . . . . .	32-48

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