THE SONG OF THE TYPE.

Nightly, while the millions sleep,
Revelers shout, the wretched weep.
And the watch lone vigil keeps,
    The printer works away;
With a click! click! click! click!
The type in his stick
Records the deeds of the day.

Heeds the youth with glowing face
That the lines he sets apace
Damn a soul with its disgrace?
    They bear for him no smart,
And the click! click! click! click!
Of the type in his stick
Times with his joyous heart.

Thrills yon man with sunken eye
As his nimble fingers fly,
Forming words that glorify?
    They him no joy impart;
And the click! click! click! click!
Of the type in his stick
Outruns his aching heart.

Does the reader realize,
Glancing o'er with rapid eyes,
Countless types those lines comprise,
    Picked separate from the case,
That the click! click! click! click!
Of that type in the stick
All night kept up its pace?

Thus it is through life we go,
Feeling not the joy, the woe,
Or the toiling others know.
    Ah, better is it so;
For the click! click! click! click!
Of the type in his stick
Tells less of joy than woe.
—Ernest Lacy.

ONE OF THE FINEST AND LARGEST TYPECASTING FOUNDRIES IN THE WORLD.

A visit to the premises of Messrs. Barnhart Brothers & Spindler at 183 to 187 Monroe street, Chicago, into which they have recently moved, is surprising even to those who are well acquainted with this eminent typefoundling firm's history, enterprise and business energy. To the readers of The Inland Printer, the wares of this firm are well and favorably known, and it will consequently be interesting to trace its evolution to the occupation of its present immense and thoroughly equipped establishment. Back in 1868, the foundry was established under the title of the Great Western Typefoundry, but although still distinguished by that name, it was reorganized a year later under the name of Barnhart Brothers & Spindler, and the business rapidly increased—the methods of the firm together with the quality of their products, superior copper-mixed type especially, meeting with general appreciation. The tremendous holocaust of October, 1871, which swept Chicago's business center, included the foundry of Messrs. Barnhart Brothers & Spindler; but like many of their fellow Chicagoans their misfortune only seemed an incentive to renewed efforts, and but a short time elapsed before they were again established, this time at 49 West Randolph street, and filling rapidly increasing orders with their old-time celerity and satisfaction to their customers, the accumulation of whom it was soon found rendered necessary a removal to larger premises but a few months later to 107 and 109 Madison street, which in turn the year 1876 saw them compelled to abandon for the same reason, and at 146 Fifth avenue (taking the entire building) the firm considered they would have ample accommodation for many years to come. They were "building better than they knew," it would seem, for but four years elapsed until another change was necessary, and in 1880 the establishment was moved to 115 and 117 Fifth avenue, these quarters in turn being enlarged, in 1882, by the addition of five stories of adjoining building, known as 113 Fifth avenue. Each year that the firm has been in business has been a year of progress, and the beginning of the present year found them engaged in preparing the premises at 183 to 187 Monroe street for their occupation in the early spring. These buildings consist of a front building six stories in height and 60 by 125 feet in area and a rear building of the same height 60 by 50 feet. The forepart of the first floor of the front building is occupied by the business offices, which are finished in black walnut throughout, and are commodious and well equipped—in themselves, with the large clerical force, significant of the volume of the trade done. Slightly to the rear on each side of the lofty room is arranged an expansive array of packages of type ready for shipment on short notice. The balance of the floor space is taken up with a display of new machines of every description and manufacture, including the different makes of job presses, Babcock air-spring presses and Howard Iron Works paper-cutting machinery. Leaving the counting room and the large and interesting exhibit of mechanical ingenuity and skill, the visitor takes the passenger elevator run by an independent sixteen horse power engine at the front of the building to the largest and finest typecasting room in the world. This is situated on the sixth floor and the spectacle disclosed to the visitor is of supreme interest—the rapid play of the typecasting machines which seem almost insane in their automatic perfection, the flicker and flash of the flame in the fire pots, the silvery type falling in continuous streams, the neatly attired girls setting the type with a rapidity beyond belief, all conspiring to produce a busy and cheerful scene not easily forgotten. The room is lit from above with a skylight 20 by 68 feet, and it is convenient to here state that for daylight there has been made ample provision, both the buildings.
being lighted on three sides from street and alley. Descending to the fifth floor the visitor witnesses the process of finishing the type and dividing it into fonts. On the fourth, fifth and sixth floors of the rear building are carried on the processes of the manufacture of brass rule, matrix fitting, mold making, etc., in addition to type making. The third floor is the home of the Typesetter, well known to the printers throughout the continent, and in this neat composing room the handsome specimens of the firm's wares are produced. The second and third floors, devoted to the machine shops and repairing, are in charge of a large and competent staff of workmen, and every appliance known for such work may be here seen. The basement of the rear building is used for the engine and dynamo room and here also the metals are mixed, the base- ment of the front building giving storage for boxed machinery, cases, stands, etc. Both buildings are heated with steam and supplied with light from the firm's own electric light plant with six hundred lamp capacity, the power used being one eighty and one seventy horse-power engine of latest pattern. Due precautions are taken for the preservation of the firm's valuable matrices and molds, no less than three separate vaults being used for these, as well as papers, books, etc. All the departments are admirably equipped, electric bells and speaking tubes connecting them all. Special attention is paid to the accommodation and convenience of customers, writing desks and other facilities being placed exclusively for their use.

Messes Barnhart Brothers & Spindler owe no allegiance to any trust or syndicate nor do they contemplate doing so, their past success and present progress giving them sufficient confidence for their future, and, employing in round numbers some three hundred hands they are quite able to meet all the requirements of their numerous customers.

PRACTICAL NOTES.
The paste that is used by the Eastern stereotypers on the roller molding machines is made thus: To 1/3 gallons of water add 25 pounds of glue; allow to stand over night, and then cook slowly for two hours. Take 1/3 pound best English Paris white and one pint of flour, place them together in a basin and add sufficient water to make the mixture the consistency of buttermilk, add this to the glue when cooked as above, and allow the whole to cook for one hour.

Rtn marking ink that is unaffected by soap alkalies is made as follows: Enough finely powdered cinnabar to form a moderately thick liquid is very intimately mixed with egg albumen previously diluted with an equal bulk of water, and beaten to a froth and filtered through fine linen. Marks are formed on cloth with this liquid by means of a quill, and are fixed after they have become dry by pressing on the reverse side with a hot iron.

At 151 Congress street, Boston, Massachusetts, there is an exhibition an attachment for drill presses which is something new in mechanics, and as its possibilities are so great and its uses so many, it will, perhaps, interest readers of this journal to hear of it, especially machinists and makers of printers' machinery. It is called a polygonal boring and turning tool, and when attached to a drill is capable of boring any geometrical figure, such as round, square, hexagon, octagon, triangle, diamond, star, oval, half-round, etc. The machine in question was being used to bore iron, brass, slate, marble and wood, and to witness its operation in cutting square and octagonal holes in iron was really a novelty. One is inclined to be a little incredulous until he actually sees the work done, but once he does, he is convinced of its practicability and usefulness. It is claimed that any machinist can successfully use this tool, that it requires no more power than an ordinary drill, and can be speeded just the same; and when attached to a lathe it will turn the perimeter of any geometrical shape or figure. Doing work that hertefore was only possible by hand in a much shorter time, and in a more thorough manner, it will certainly commend itself at once to the attention of users of this class of machinery. The Larrabee Machine Company are handling it.

HON. JACOB H. GALLINGER.

We publish herewith the portrait of Hon. Jacob H. Gallinger, senator from New Hampshire, who was fittingly selected as the orator upon the occasion of the dedication of the Childs-Dressel Home for Union Printers. A brief history of the distinguished gentleman's career, emphasizing as it does the possibilities in this republic for those who have energy, brains and perseverance, cannot fail to be interesting.

Senator Gallinger was born in Cornwall, province of Ontario, March 28, 1837. He was the son of a farmer, and the fourth in a family of twelve children. His parents were of German descent, and were possessed of but moderate means. Like many others who have achieved high success in after life he was forced at an early age to rely upon his own resources. At the age of twelve he entered that incomparable political training-school, a newspaper office, served an apprenticeship of four years, and made himself master of the "art preservative." After working at his trade for one year in Ogdensburg, New York, he returned to Cornwall, and for a year edited and published the paper on which he had served his apprenticeship.

In 1855 he began the study of medicine in Cincinnati, Ohio. During the vacations he eked out his scanty means by working in the office of the Cincinnati Gazette as reporter, proofreader, or compositor. He completed his medical course in May, 1858, graduating with the highest honors of his class. He practiced his profession in Cincinnati for one year; devoted the next year to study and travel; and then, in July, 1860, went to New Hamp- shire, where he has since resided, and where he has built up a large and lucrative practice.

While working at the printing business, Senator Gallinger took a live interest in the organization of the craft. Unionism was then in its infancy, and among the pioneers in the cause, which today provides a home for its veteran adherents, was the subject of our sketch. He represented Cincinnati Union on the floor of the National Typographical Union, and his honored name today is enrolled among its permanent members. For quite a number of years, however, the senator enjoyed the unique distinction of being carried on the roll of deceased members, having been reported dead at the annual session of 1866. Upon his advent
PRACTICAL AIDS TO FINE PRINTING.

BY AN INLAND PRINTER.

Many are the desires resorted to by the modern printer to produce fine work, one of the principal of which, and more frequently used than any other during the past few years, is what is commonly known as "rule-twisting." Designs both simple and intricate, some of them truly wonderful in their conception and execution, have been evolved from the fertile brain of the inventive compositor, and the pages of The Inland Printer have been the means, for some years past, of placing before the printing fraternity samples of more or less merit in this line of work.

Several of the designs above referred to have been both useful and ornamental, and have demonstrated beyond the shadow of a doubt the capabilities of brass rule in the hands of an ingenious and painstaking printer; but the question will arise in the minds of many as to whether it is a good thing to use brass rule in this way. Is there not some other method of arriving at equally good, if not better results, at a less expenditure of time and labor and without the waste of material which usually results from the production of these elaborate pieces of workmanship; for, without question, the rule used is rendered useless for any other purpose, and the time expended in executing the work might be more profitably employed. I do not wish to infer that time spent in the production of work of this nature is actually wasted, for such work has brought renown and profit to both the artist and his employer, and has, in one or two instances, been the means of establishing firms who make this particular kind of work a specialty. It will be my aim, in the succeeding paragraphs, to show how, by the aid of allied arts, similar results may be produced at a large saving in time and money.

Reference has been made by more than one writer in the pages of this journal to the benefit which a knowledge of drawing would be to a job printer. To young printers especially I would say, cultivate an aptitude for making sketches, preferably in outline, with pen and pencil, for you will be surprised to find how great a help such knowledge will be when you are sufficiently advanced to practice job composition. Without the ability to sketch a design before you attempt to produce it in rulework, you will be placed much in the position of a builder who is called upon to erect a house without plans,—you might succeed in accomplishing the purpose you have in mind, but the chances are that you would meet some unlooked-for difficulty and your work be rendered useless and your time wasted. There is where your ability as a draftsman would prove valuable.

It is at this point, however, where I would call in aid No. 2—photography, in relation to engraving, to supplement aid No. 1—drawing, in producing the desired result in a neat, expeditious and economical manner. Of recent years photography has played such an important part in relation to letterpress printing, that printers of the present day must recognize the fact that photography is a very close ally, and will prove to be a still more close and valuable ally in the near future. Instead of making a rough sketch of the design you wish to reproduce as a printing surface, devote a little more time to your sketch and make a clear outline in ink of the design you wish to use, send it to the photo-engraver, and receive in return a zinc-plate, which you can have mortised for the insertion of type, at a cost little more than the electrotype of the rulework would amount to, had you produced your design in that manner. The design being reproduced in this way does not make you less an artist, while the saving to your employer of the time you would have expended upon the work and the cost of the rule used for it will be a considerable item. Besides this, designs can be made in this manner, and being mortised, may be used for several jobs at the mere cost of changing the type to be used in connection therewith. Designs suitable for use in billheads, invoices, business cards, etc., could be produced in endless variety in this manner, while cover pages for catalogues, titles, etc., might be made far more attractive and at much less cost. In dull seasons the artist-compositor could utilize spare moments in making new designs, and when work is rushing and a job comes in calling for something special, all he would have to do would be to select from among the