



TYPE DESIGNING DEPARTMENT

The upper picture on page nine shows a section of the main Type Designing Room, in which the designs of the various members of the great type families are first worked out on paper, and then by ingenious mechanical devices transformed into metal patterns by a method, first used by the American Type Founders Company, which has revolutionized the art of producing patterns and matrices for casting types.

After the patterns are prepared they are used on the Benton Matrix Cutting Machines shown in the lower picture on page nine. These machines cut the matrices into the solid metal with a degree of accuracy impracticable by the hand processes which these machines have made obsolete in the Central Plant. These matrix cutting machines, and the machines for sharpening the cutters and measuring the work, are made and used exclusively by the American Type Founders Company.

The various inventions used in this department have made matrix-making an almost infallible science, where before it was the least scientific of type-making processes. In this connection the fact of real importance to the printer is that these inventions have considerably improved the quality of types, both artistically and mechanically.

TYPE CASTING DEPARTMENT

It would require a fair-sized volume to illustrate and describe all the departments of the Central Plant. We pass with a bare mention the Departments of Mould-making, of Brass Types and of Casting Machine Building and Repairs; the Matrix Vault, the Power House with its Electric Generating Plant, the Metal House, the Chemical Laboratory, the Shipping Department (illustrated on page eleven), and last, though not least, the extensive Specimen Printing Department in which this Specimen Book was printed.

On page ten will be found views of two Type Casting Bays, and a picture of the Barth Automatic Casting Machine made and used exclusively by the American Type Founders Company. There are six of these bays, each a large-sized type foundry in itself, lighted and ventilated on all sides and in the roofs. Each Barth Automatic Type Casting Machine requires electricity for power, gas for melting the metal, cold water for cooling the mould, and cooled air for regulating the temperature; and all the conduits for supplying these forces are under the floor.

In addition to the six Casting Bays, a section of the main floor more than thirty feet wide and extending one-half the width of the front of the building and two-thirds of the length of the building is occupied by various steam and hand casting machines, dressing machines, kerning machines and by various hand processes used in making type.

THE DIVIDING DEPARTMENT

The upper picture on page eleven is a view in the Main Dividing Room, which extends almost the entire length of the building. Above this room there is another Dividing Room of nearly the same extent. The Dividing Rooms are splendidly lighted and systematically arranged to take care of the product of the casting machines in adjoining rooms.

Millions of pounds of type are handled here annually.

Set in Bodoni