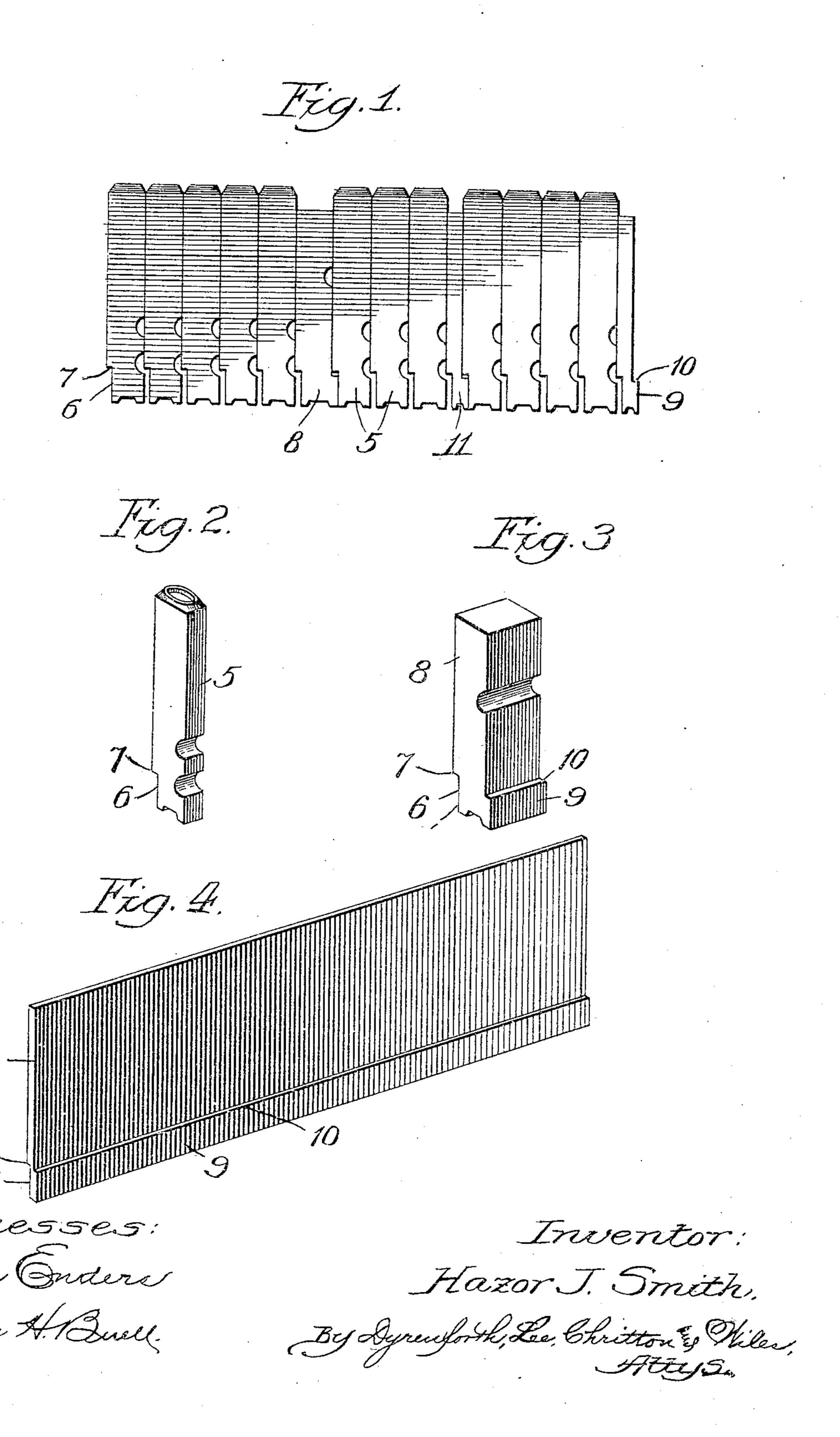
## H. J. SMITH. PRINTING TYPE. APPLICATION FILED SEPT. 1, 1909.

959,968.

Patented May 31, 1910.



## UNITED STATES PATENT OFFICE.

HAZOR J. SMITH, OF CHICAGO, ILLINOIS, ASSIGNOR TO AUTOMATIC LETTER MACHINE COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

## PRINTING-TYPE.

959,968.

Specification of Letters Patent.

Patented May 31, 1910.

Application filed September 1, 1909. Serial No. 515,586.

To all whom it may concern:

Be it known that I, Hazor J. Smith, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Printing-Type, of which the following is a specification.

My invention relates to improvement in type for use, more especially, in letter-10 presses and similar connections where the printing is produced from loose forms in

light chases having base-plates.

It is well known that unless a form is tightly locked in its chase, the blank-type, space-lines, etc. are apt to rise to the printing-plane, become inked and make impressions upon the printed surface.

My object is to overcome this fault, without rendering it more difficult than hitherto to change the printing type when making

corrections in the form.

In carrying out my invention I provide a font of type in which the printing type will operate as a means for holding the blank type, space-lines, etc. against rising to the printing-plane, without itself being held against removal from, or insertion into, the form in the usual way when correcting the form.

In the accompanying drawing,—Figure 1 illustrates a section of a form employing my improved type; Fig. 2, a perspective view showing the construction of the printing-type; Fig. 3, a similar view of a blank type illustrating the construction of the spaces, quadrats, etc.; and Fig. 4, a perspective view illustrating the construction of the

space-lines, leads, reglets, etc.

The printing-type 5 of the font are formed in the usual way, with the exception that a recess 6 terminating in a shoulder 7 is provided in the base-portion of its rear face. The blank type 8, which includes spaces, en-quads, em-quads, double em-quads, etc., are formed at the bases of their rear faces with similar recesses 6 terminating in shoulders 7 and at their opposite sides with projections 9 terminating in shoulders 10 adapted in practice to fit into the spaces 6 of an adjacent

line of type in the form. The space-lines 50 11, reglets, etc. are, like the blank-type, formed with recesses 6 and shoulders 7 at one side and projections 9 having shoulders 10 on the other side. When a form is set up, as illustrated in Fig. 1, the projections 55 9 of the blank-type 8 and space-lines, etc., 11, will extend into the spaces 6 of the printing and blank type, of an adjacent line, and the space-lines, etc., the shoulders 7 preventing the blank-type, etc. from rising above 60 the point wherein their shoulders 10 engage the shoulders 7. Naturally the pressure against the printing-type in printing prevents them from becoming displaced and they in turn prevent the blank-type, etc. 65 from rising to the printing-plane. The printing-type are not held, there being no necessity therefor, and may be readily withdrawn with tweezers and also readily inserted when the form is being corrected. 70 It is rarely that a space or quadrat has to be withdrawn or inserted, but if it should be in the wrong place in a line the type between it and the proper place may, for example, be withdrawn, the space or quadrat shifted and 75 the type again inserted.

The gist of my invention resides, broadly stated, in providing the printing type with means for holding down the blank type without its being similarly held by either 80 printing of blank type. I prefer to carry out my invention by providing the printing type with shoulders which, in a form, will overlap or overlie shoulders provided on the blank type, as described; but this construction may be varied without departing from the spirit of my invention as defined by the

claims.

In the claims, it is intended that the term "blank type" may include all the separable 90 pieces of a printing form, such as spaces, quadrats, space-lines, reglets, etc., which are not to print.

What I claim as new and desire to secure

by Letters Patent is—

1. In a printing form, the combination of blank and printing type, the blank type, to obstruct withdrawal thereof, interlocking

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with adjacent type, and the printing type being unobstructed, by either the blank type or other printing type, against withdrawal.

2. In a printing form, the combination of printing type having a shoulder on one side and blank type having shoulders on opposite sides, so constructed and arranged that the printing type shoulders serve to hold down

the blank type but not other printing type, and the blank type shoulders serve to hold 10 down other blank type, but not printing type, for the purpose set forth.

HAZOR J. SMITH.

In presence of— L. Heislar, R. A. Raymond.