

(No Model.)

J. G. PAVYER.

PRINTER'S TYPE.

No. 388,713.

Patented Aug. 28, 1888.

Fig. I

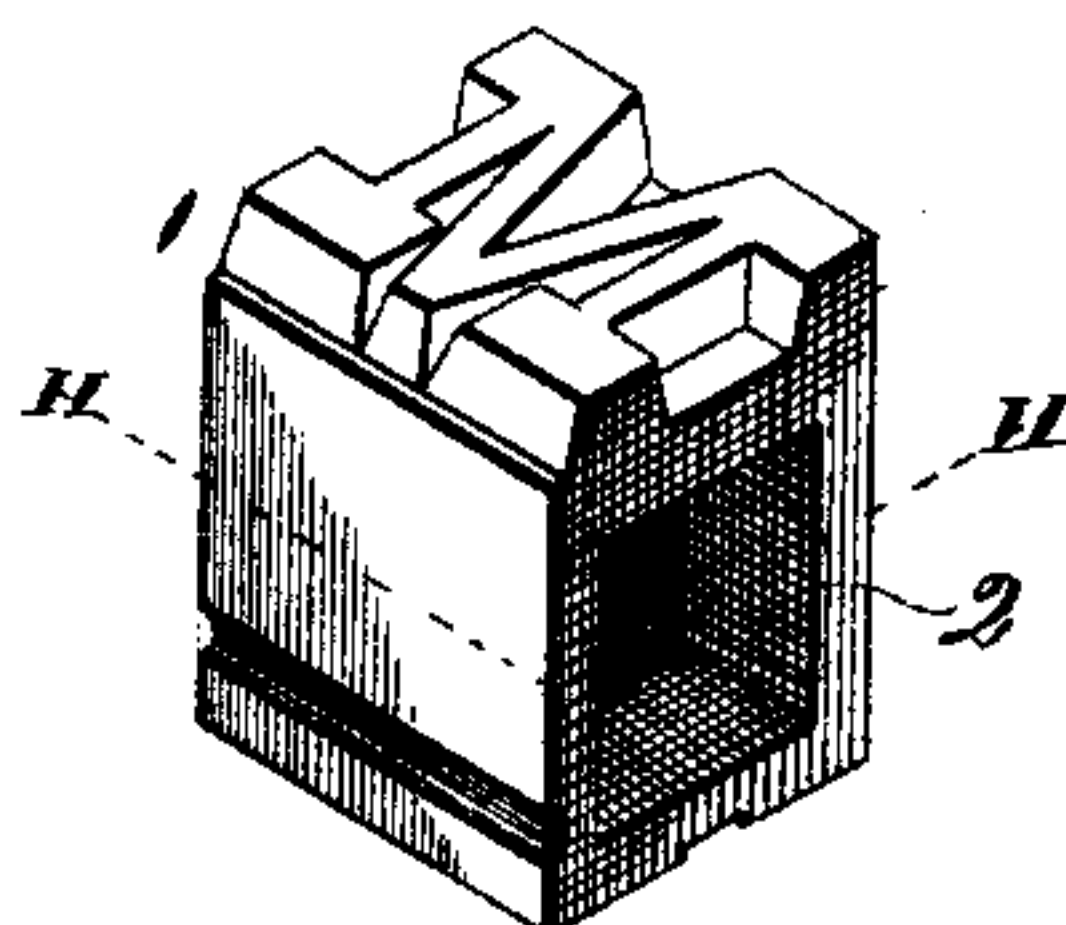


Fig. II,

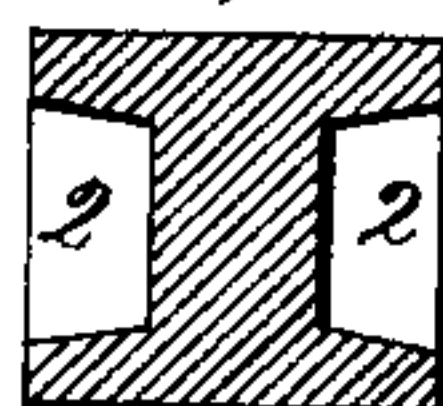
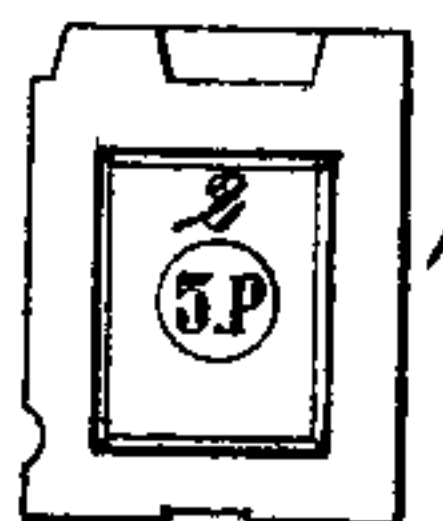


Fig. III,



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UNITED STATES PATENT OFFICE.

JAMES G. PAVYER, OF ST. LOUIS, MISSOURI.

PRINTER'S TYPE.

SPECIFICATION forming part of Letters Patent No. 388,713, dated August 28, 1888.

Application filed June 14, 1887. Serial No. 241,274. (No model.)

To all whom it may concern:

Be it known that I, JAMES G. PAVYER, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Printers' Type, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Figure I is a perspective view of a type of the improved make. Fig. II is a horizontal section at II II, Fig. I. Fig. III is a side view of the type.

Where the type is large, as shown in the drawings, I prefer to make a deep recess, 2, upon each side; but in small type a recess upon one side would be sufficient.

It will be seen that the foot or bottom of the base of this type is solid and has the same form and size as that of ordinary type, and that ample support is given to all parts of the face, and while these things are so that the type contains considerably less weight of metal than if made solid. In casting all articles, especially where the article is thick and cools from the outside, the interior is liable to be spongy, and this is particularly likely to be the case with type, the metal being thrown into the mold in jets, which are liable to carry in air or other gases that become imprisoned in the body of the type. With an increase of outer surface there is greater facility for the escape of the gases, and consequently the interior of the type is more solid. The solidity of the type is also increased from another cause, which is this: molten metal cools first at the surface, and almost all metals and alloys, including type-metal, condense in cooling, and

as the surface sets at the full size which the type has when the surface becomes solid it is obvious that there will be a movement of the metal toward the surface in cooling, leaving the interior porous. The counter action resulting from the cohesion of the metal and the pressure of the air will draw in the surfaces at the points where they have the smallest degree of solidity—namely, the middle of each surface. This latter action causes the middle of the face to be drawn inward, thus giving the face a concave form. Now it will be seen that in the improved type the center would cool quite rapidly, and not only would it be more solid, but the face would not be made concave to the same degree. The recesses 2 are made as large as is consistent with the strength of the type, the recesses varying in size according to the size and shape of the type.

The improved types, being solid in the center, will not be liable to sink under the impression when used. This common types of large size are liable to do, owing to the spongy character of the interior. The size of the type or other mark may be impressed in the bottom of the recess, as seen in Fig. III.

I claim as my invention—

A type having the foot or bottom of the base solid and of the full area of the type and recess in the side, leaving the type solid at each of the four vertical corners and a supporting-wall beneath the center of the face.

JAMES G. PAVYER.

In presence of—

SAML. KNIGHT,
JOS. WAILE.