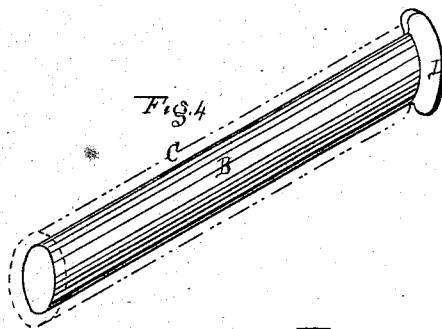
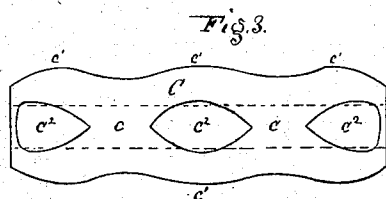
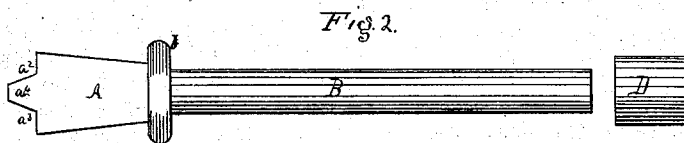
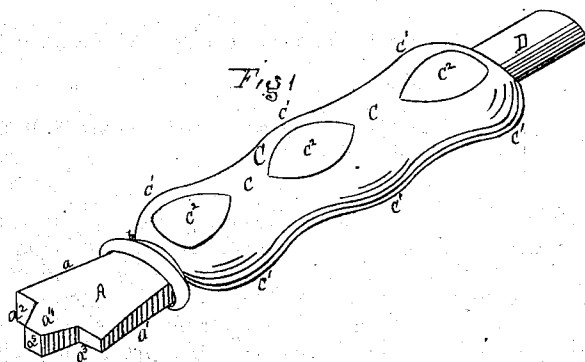


J. H. FREY.
 Printers' Shooting-Sticks.

No. 158,792.

Patented Jan. 19, 1875.



WITNESSES
 James G. Kay
 L. L. Miller

INVENTOR
 James H. Frey
 By Batewell & Kerr
 Attys.

UNITED STATES PATENT OFFICE.

JAMES H. FREY, OF CLEVELAND, OHIO, ASSIGNOR TO ALLAN C. BAKEWELL
& CO., OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN PRINTERS' SHOOTING-STICKS.

Specification forming part of Letters Patent No. **158,792**, dated January 19, 1875; application filed
November 3, 1874.

To all whom it may concern:

Be it known that I, JAMES H. FREY, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Improvement in Printers' Shooting-Sticks for Locking up Forms of Type; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a perspective view of a shooting-stick embodying my invention. Fig. 2 is a view of the same, the sleeve being removed. Fig. 3 is a view of the sleeve detached, and Fig. 4 is a modified form of shank preferred when an elastic sleeve is used.

Like letters of reference indicate like parts in the several figures.

My invention relates to that class of articles known as printers' shooting-sticks; and it consists, first, in providing a shooting-stick with a handle of a material which will not injure the face of the type, of a form which will prevent the contact of the metallic portion of the stick with the surface of the type, and will counteract the tendency of the stick to roll; and, secondly, in a shooting-stick tapered from side to side, and having right-angled shoulders upon opposite sides, leaving a square-faced projection suitable for driving down quoin and furniture.

Shooting-sticks, as heretofore made, have in general been of a form and material liable to injure the type or other surface upon which they were carelessly placed, either by rolling or by the sharp ends and shoulders of the stick coming into forcible contact with the faces of type or bed.

The object of the present invention is to overcome these objections by producing a stick having the following requisites: a handle of such a form as will prevent the contact of the ends of the stick with the surface upon which it rests, of a shape that will obviate the tendency of the stick to roll, and of such a material as will not injure the surface upon which the stick rests.

I will now proceed to describe the devices employed by me, so that others skilled in the art may accomplish the result specified.

In the drawing, A represents the shooting-

stick proper, having a shank, B, and a cap or head, D, for receiving the stroke of the mallet. The lower end of the shooting-stick may be made to taper from side to side—that is, thicker on the side a than on the opposite side, a^1 —and provided with two shoulders, a^2 , forming the projection a^4 , terminating in the flat surface a^5 . This is the form I prefer to give the shooting-stick proper, as I obtain thereby two shoulders corresponding to the varying quoin-space, and a flat projection, which may be used in driving down quoin, chase, and furniture after locking up, combining with the shooting-stick the advantages for which a second device has heretofore been required; but the form of the stick does not modify the devices hereinafter described. C represents a sleeve or sheath of wood, rubber, felt, *papier-maché*, or other suitable material not likely to deface the type, and is in general, when made of wood, of a form corresponding to that shown in the drawing—that is to say, turned to fit the hand with depressions, as shown at c c , and enlargements, as at c^1 c^1 , the enlargements extending sufficiently far beyond the flare A of the stick to prevent the same from coming in contact with the surface on which the stick is laid. At one or more points of the handle I form the flattened surfaces c^2 , upon which the stick will rest, or which will check and prevent the rolling of the stick when carelessly laid down. When a wooden sleeve or sheath of other non-elastic material is used, the cap or head D is made detachable, so that the sleeve may be slipped upon the shank, and secured in place by ferrule or cap D, which receives the blow of the mallet and protects the sleeve. When an elastic sleeve or sheath is employed, the head may be formed in one piece with the shank, and the shank may be oval, as shown in Fig. 4, or of some other form which will fulfill the requirements specified.

Having thus described my invention, and set forth the advantages thereof, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a shooting-stick having a driving-head, D, a handle, C, consisting of a sheath or sleeve of a material that will not deface the type, and provided with enlarged portions c^1 c^1 and flattened surfaces

c², substantially as and for the purpose specified.

2. A shooting-stick tapered from side to side, and having right-angled shoulders upon the opposite sides, leaving a square-faced projection suitable for driving down quoin or furniture, substantially as specified.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JAMES H. FREY.

Witnesses:

SALEM A. HART,

THEO. C. SCHENCK.