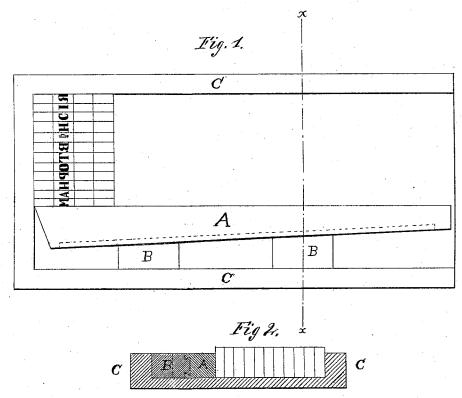
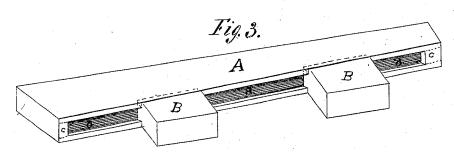
R. B. TOPHAM. COMPOSING STICK.

No. 110,695.

Patented Jan. 3, 1871.





Withvesses: Wamsheuney) J.M.Kenney()

Inventor: Rich? B. Topham

## UNITED STATES PATENT OFFICE.

RICHARD B. TOPHAM, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVEMENT IN PRINTERS' FURNITURE.

Specification forming part of Letters Patent No. 110,695, dated January 3, 1871.

To all whom it may concern:
Be it known that I, RICHARD B. TOPHAM, of Washington, in the District of Columbia, have invented a new and useful Improvement in Combination Side-Stick and Quoins for Printers' Use; and I declare the following to be a full and exact description of my improvement, reference being had to the accompanying drawings, forming part hereof.

My invention consists of a side or foot stick and quoins, so combined that the quoins may be always at hand when required for use, and that they may not be lost or easily broken.

In the accompanying drawings, Figure 1 is a plan view of the side-stick and quoins as applied to a galley partly filled with type. Fig. 2 is a cross-section of Fig. 1 on the line x x. Fig. 3 is a perspective view of side stick and quoins, showing their mode of connec-

Similar letters indicate same parts in all the

figures.

A represents the side-stick, which may be of wood or metal, beveled on one side, and in the beveled edge a dovetail slot or groove is cut, nearly or quite the whole length of the stick.

B B represent quoins, which are movably attached to the side stick A by a tongue, b, fitting the groove a a a in the stick. The quoins have a bevel on one side corresponding to the bevel of the side stick, and of course have a wedging action when forced toward the broad end of the stick. Any desired number of quoins may be attached to each side or foot stick. The quoins are pre-

vented from escaping from the groove by stopping up both ends of the groove with a wedge, as shown at cc, Fig. 3, or by inserting a pin, screw, or equivalent device in place of the wedge. This construction also prevents the quoins being driven against the end of the chase or galley, from which position it is difficult to extract a quoin without injury to all the material employed.

The construction of foot-sticks and side-

sticks is identical in principle.

The details of construction may be reversed, so as to make the tongue on the side-stick and the groove in the quoin, without departing

from the spirit of my invention.

By employing this combination, much time may be saved to the printer in finding and adjusting quoins of the proper size, and both quoin and side-stick are more durable. The quoin is also held from violent contact with the imposing-stone when locking up a form, which is the great source of damage to imposing stones.

Having thus fully set forth my invenin the foregoing description, what I claim as new, and desire to secure by Letters Patent

The combination and arrangement of the side-stick A with the quoins B B, the quoins being furnished with a dovetailed tongue, b b, fitting loosely in the groove a a a in the. stick, substantially as shown and described. RICHD. B. TOPHAM.

Witnesses:

WM. A. MCKENNEY, J. McKenney.