

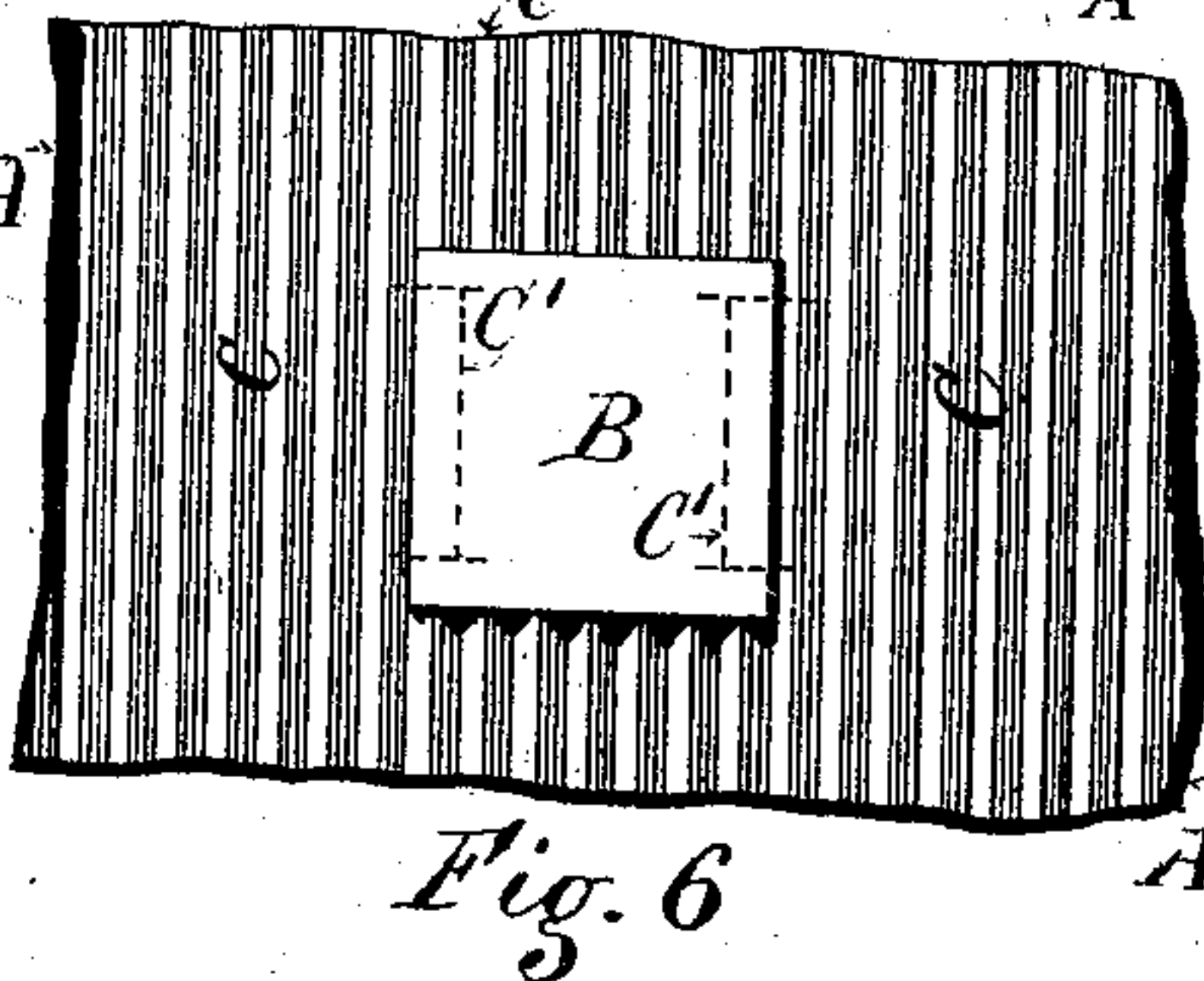
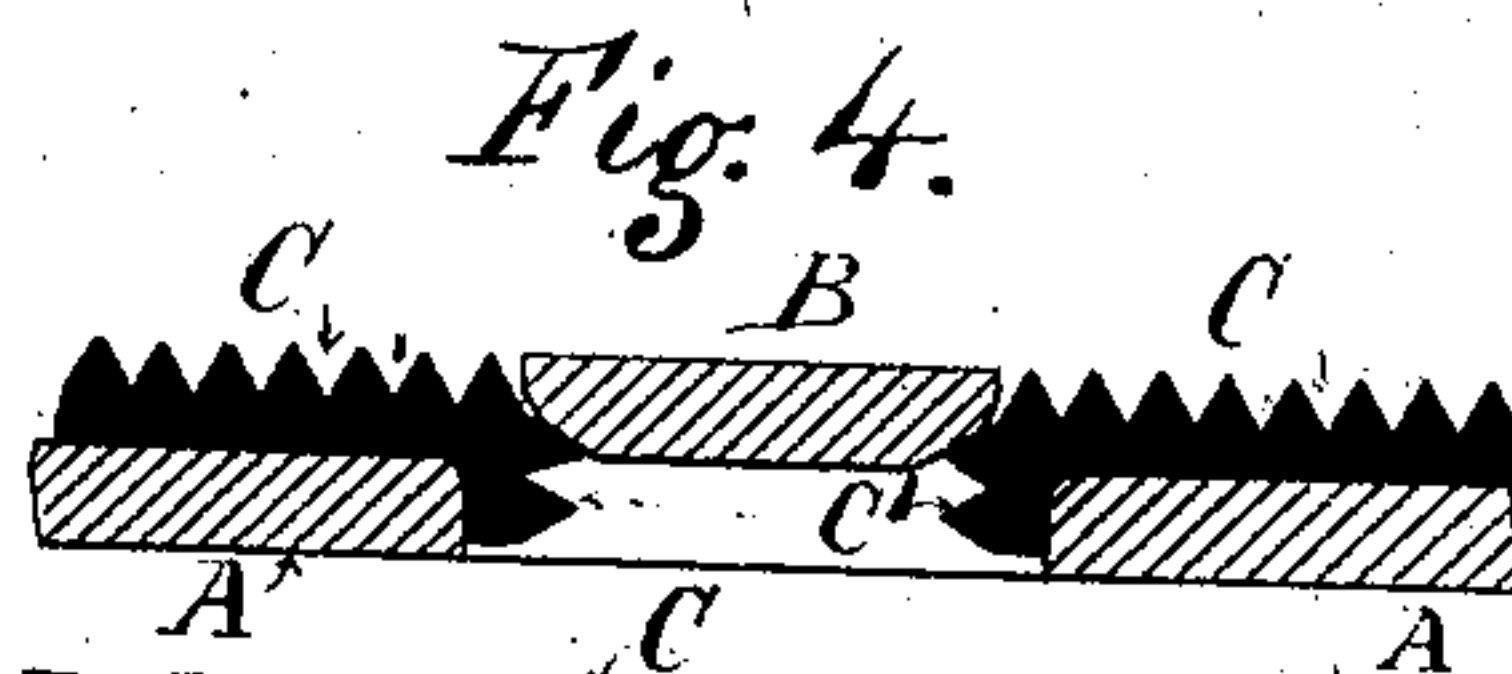
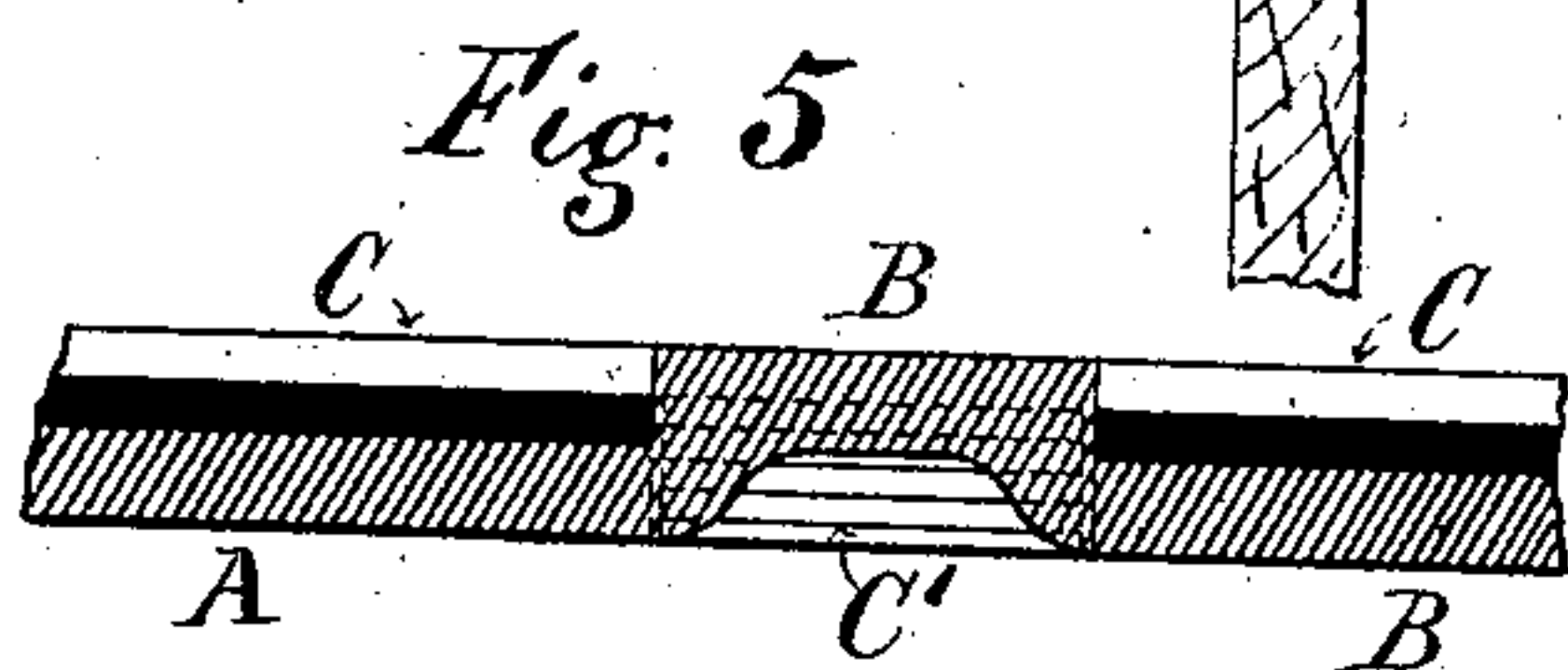
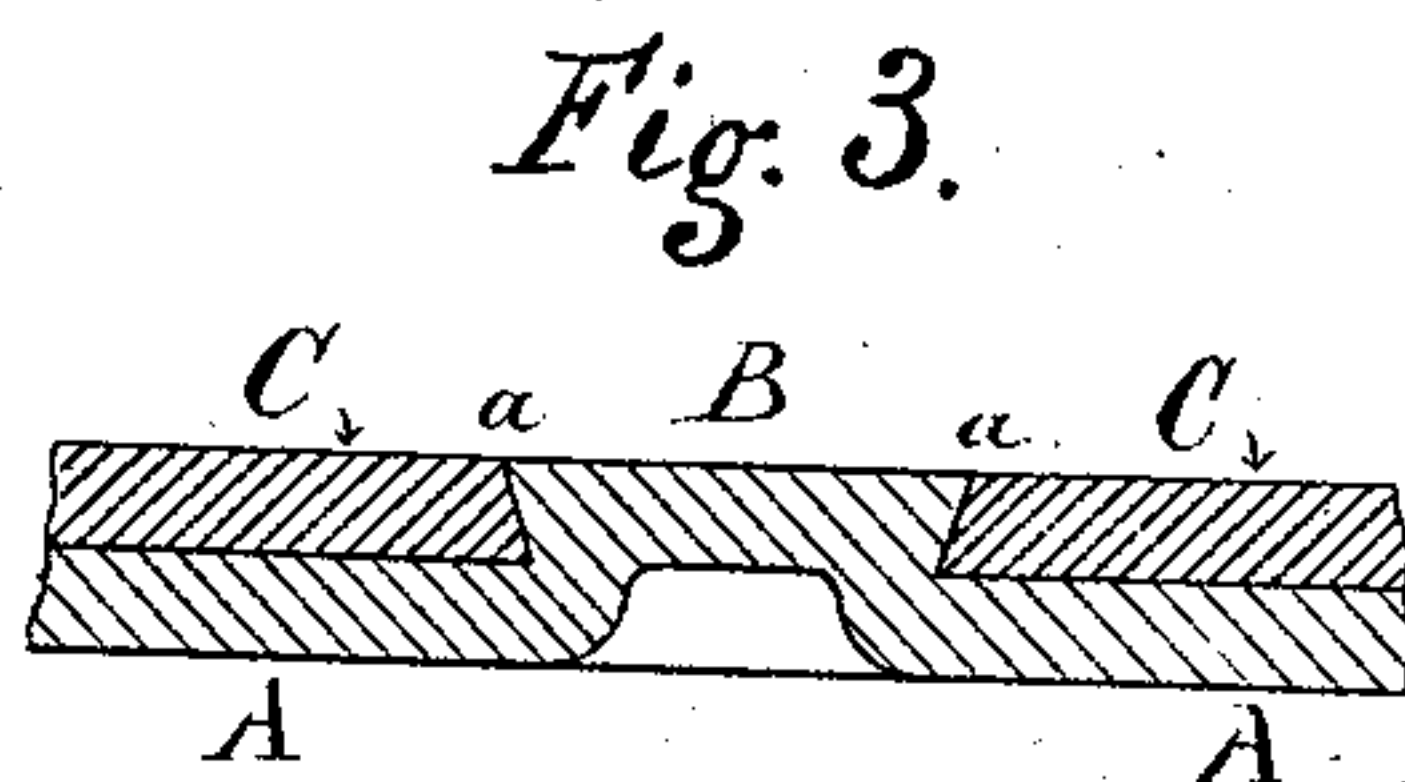
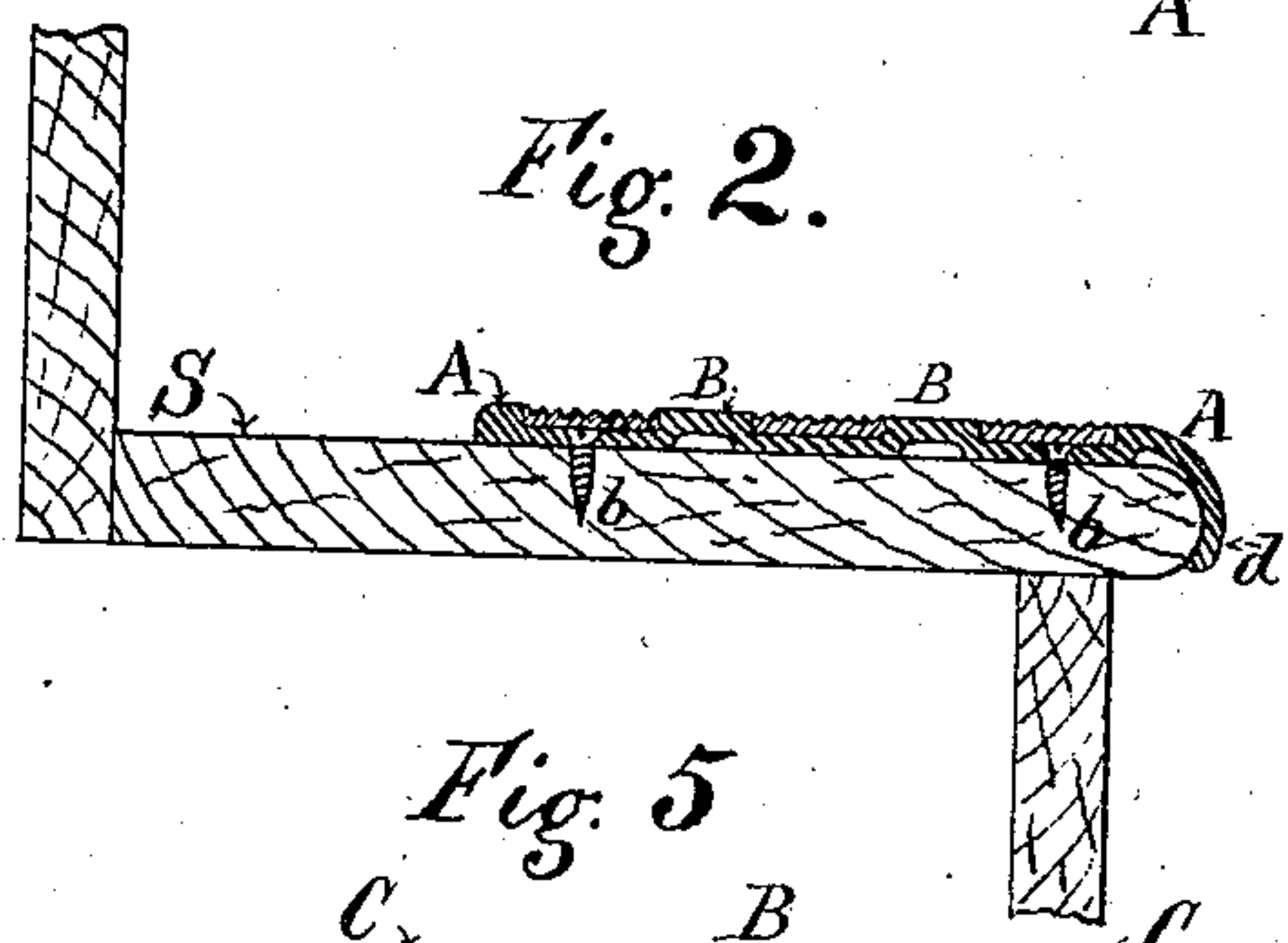
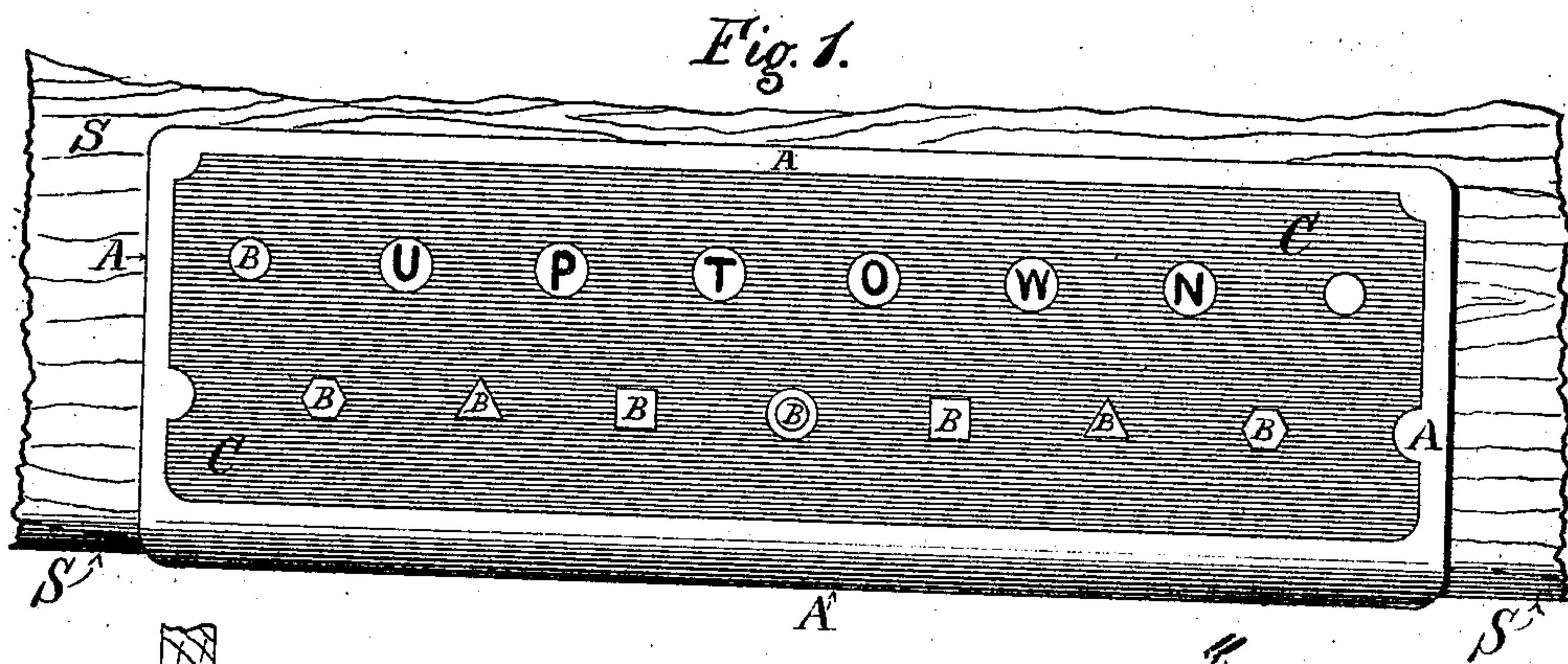
(No Model.)

A. SPADONE.

MAT, STAIR, OR STEP TREAD OR PAD.

No. 334,994.

Patented Jan. 26, 1886.



WITNESSES:-

J. S. Forster,
Wm. H. Weightman

INVENTOR:-

A. Spadone

UNITED STATES PATENT OFFICE.

AMADEE SPADONE, OF NEW YORK, N. Y.

MAT, STAIR, OR STEP TREAD OR PAD.

SPECIFICATION forming part of Letters Patent No. 334,994, dated January 26, 1886.

Application filed November 11, 1885. Serial No. 182,411. (No model.)

To all whom it may concern:

Be it known that I, AMADEE SPADONE, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Mats or Pads for Steps, Stairs, or Platforms, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to that class of protective mats or pads which are usually applied to steps, stairs, or platforms, where, through constant use, hasty wear and tear is experienced, resulting in a continued necessity for repairs or renewal. Mats or pads of this kind have been made by forming projections or studs of uniform height on a plate of rubber or other elastic material, which studs projected through perforations in a plate of metal, the rubber being placed at the bottom and a metallic covering over it to hold it in place. Mats have also been made by securing, separately, elastic buttons or studs of a uniform height in a floor or in a plate of wood or metal. In the first construction considerable trouble is met in repairs or changing, while in the second, as also in the first, the buttons or studs cut off or drag out in a short time. Both are found wanting for such reasons.

The object of my invention is to overcome these troubles and to economize as far as possible in the cost and trouble of such renewals of the mats or pads, as well as to do away with the present universal injury to the steps, stairs, or platforms arising from the driving of nails or tacks in new places at each renewal of such sheet-rubber treads or mats.

My improvements consist in the construction and combination of a frame-work or foundation-plate of metal, porcelain, or equivalent material, within the area of which are set, erected, or scattered, in a pattern or otherwise, hubs, bosses, or projections about or around which the india-rubber mats or pads are laid in sheets; thus exposing a combined hard fixed surface and a compressible friction-surface developing a tread not easily worn out and over which there can be no slipping or sliding.

Certain other improvements consist in special means for retaining or holding in place such inlaid india-rubber mats or wearing-sur-

faces, where specially rough or hard usage is experienced.

Other improvements consist in the combination of any or all of the several parts or details herein described or specified in their several connections and duties. The rubber facing is laid flush with the hubs or bosses.

In the drawings, Figure 1 represents a tread embodying my improvements as applied to stair purposes. The forward side of the framework is here returned over the edge of the steps as a protection. Such return may be used or not, according to necessity or choice. Fig. 2 represents a sectional view of Fig. 1. Fig. 3 represents a detail sectional view of a method of fastening or holding the inlaid rubber matting or facing in place. Figs. 4, 5, and 6 represent detail views of a second method of fastening or holding the inlaid or surface matting or material in place, a small portion being clipped and forced into slots or holes beneath the bosses, hubs, projections, or borders. Fig. 7 represents in section a continuous tread for floors or platforms.

The hubs, bosses, or projections may be formed or cast as a part of the frame-work or foundation, or, being made separate, may be fastened thereto, holding the inlaid or surface matting in place. The hubs, bosses, or projections may have letters cut, raised, or embossed thereon, or they may take any form—such as round, square, triangular, or polygon—according to choice. The combination of these letters or the metallic bosses may develop a name or convey information, according as arranged.

Similar letters of reference designate like parts in all the figures.

In the construction of this improved mat or pad I form a frame-work or foundation-plate, A, of metal, mineral, porcelain, or equivalent material, having a protecting border or outline of continuous or divided projections, within which the inlaid rubber material or facing C is held or laid. Within the area of such frame-work or foundation A, I cast, erect, or attach the hubs, bosses, or projections B to pass through the sheet-rubber facing for the more special purpose of dividing the reception of the thrust of tread between the bosses or projections B and the rubber facing or fill-

ing C. This frame-work or foundation, A I permanently fasten to the step, tread, or platform, as represented, by screws, at *b* in Fig. 2. The facing or filling C is inlaid upon the whole
5 surface of the frame-work or foundation, the metallic bosses or projections sticking through and holding the rubber facing in place against the thrust of the feet in passing over. In most cases, if carefully laid and fitted to place,
10 no special fastening or retaining appliances will be required, but where, through heavy usage or stealing, fastening may be considered necessary, the hubs or bosses may be shaped as represented at *a* in Fig. 3, and the facing
15 or inlaid rubber forced into place; or the bosses may be specially fastened with screws or equivalent methods gripping the sheet facing in place. A less fixed method is represented in Figs. 4, 5, and 6.

20 Clipped portions C' are forced into slots or holes located beneath the hubs, border, bosses, or projections, as shown.

Such mats or pads may be used upon the steps of cars, carriages, on shipboard, in public thoroughfares, and the like.

25 What I claim as new, and desire to secure by Letters Patent, is—

1. A mat or pad for steps, stairs, or platforms, consisting of a frame-work or founda-

tion having hubs, bosses, or projections with- 30 in its area, about which hubs, bosses, or projections a facing of rubber is inlaid exposing a combined hard hub or boss surface and a surrounding compressible surface, substantially as set forth.

2. In a mat or pad for steps, stairs, or plat- 35 forms, the combination of a frame-work or foundation provided with hubs, bosses, or projections, and a removable facing of rubber inserted or inlaid within the immediate area of 40 the frame-work or foundation, and through which the hubs, bosses, or projections protrude, substantially as set forth.

3. In a mat or pad for steps, stairs, or plat- 45 forms, the combination of frame-work or foundation A, hubs, bosses, or projections B, and the removable pad or mat C, substantially as shown and described.

4. In a mat or pad for steps, stairs, or plat- 50 forms, the combination of a frame-work or foundation, A, hubs, bosses, or projections B, removable pad or mat C, and means for securing the same, substantially as shown and described.

AMADEE SPADONE.

Witnesses:

T. S. FOWLER,

WM. H. WEIGHTMAN.