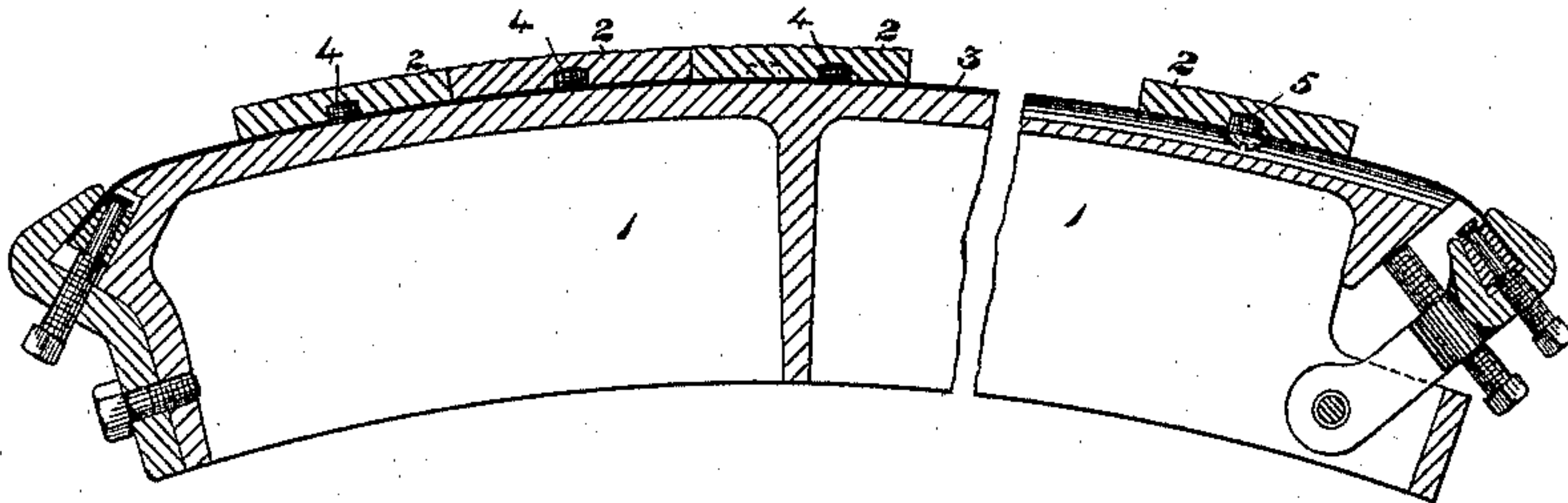


(No Model.)

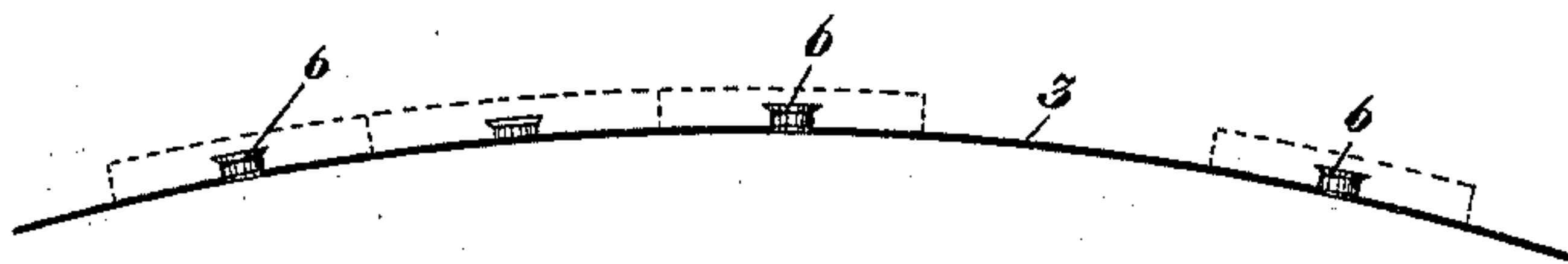
J. T. HAWKINS.  
MEANS FOR SECURING PRINTING PLATES TO CYLINDRICAL SURFACES.  
No. 604,149.

Patented May 17, 1898.

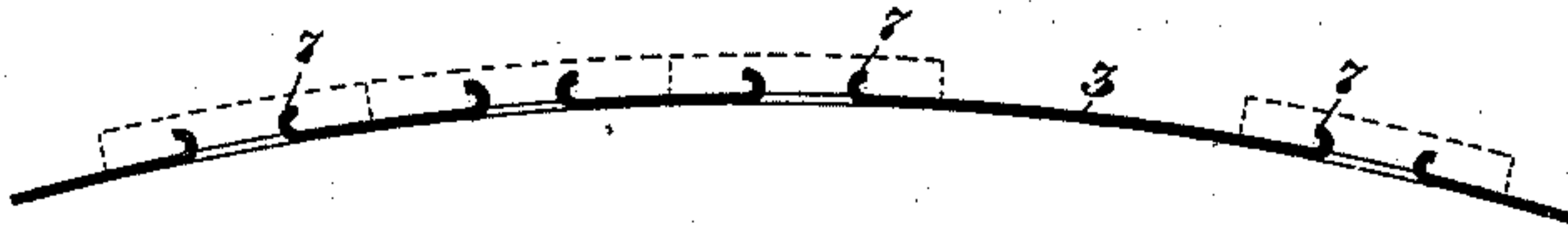
*Fig. 1.*



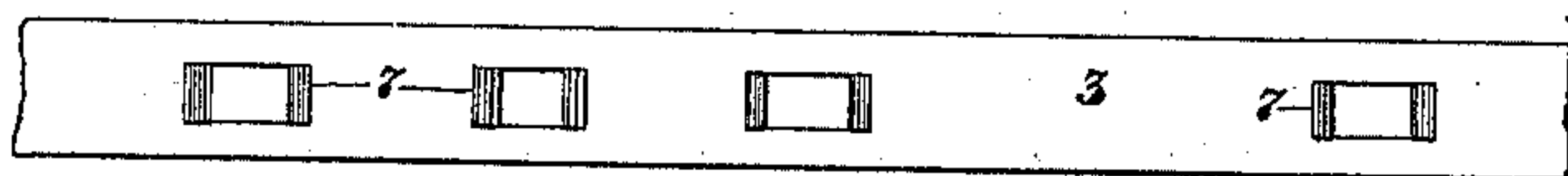
*Fig. 2.*



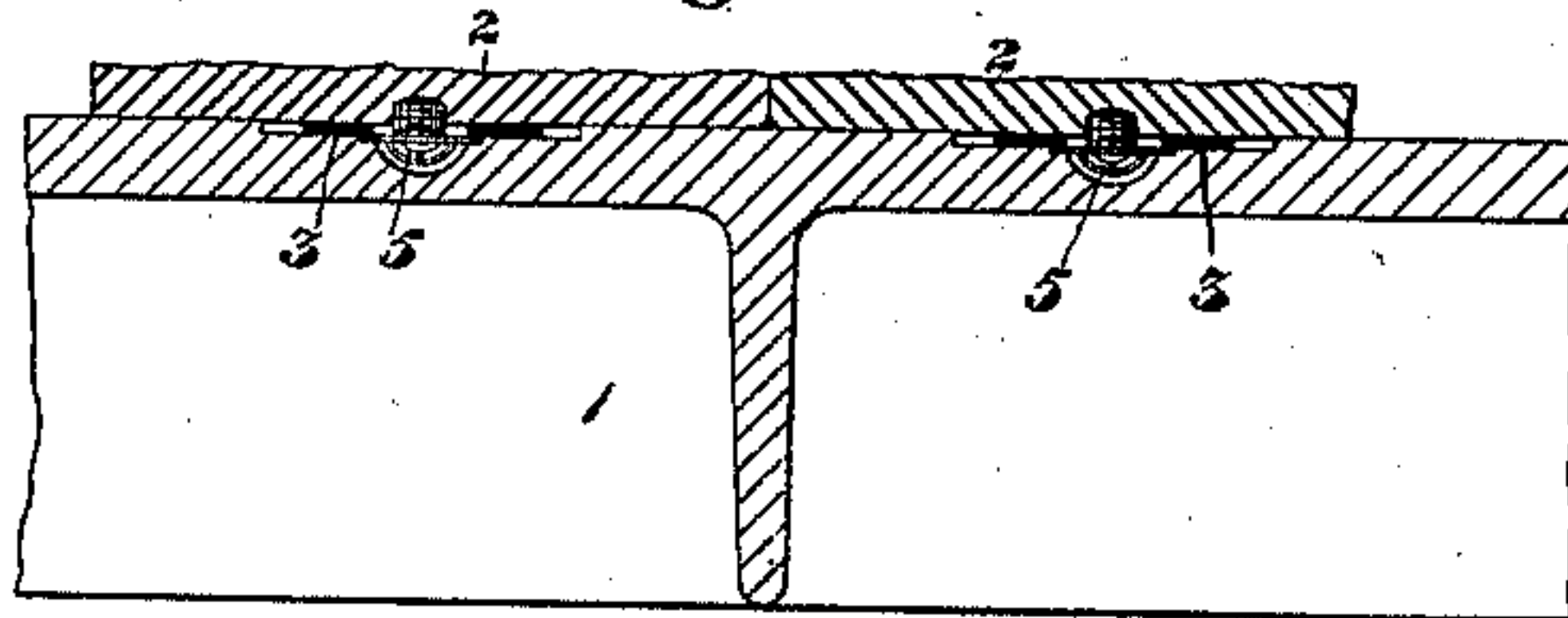
*Fig. 3.*



*Fig. 4.*



*Fig. 5.*



Witnesses.

E. O. Evans,  
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# UNITED STATES PATENT OFFICE.

JOHN T. HAWKINS, OF TAUNTON, MASSACHUSETTS, ASSIGNOR TO THE  
CAMPBELL PRINTING PRESS AND MANUFACTURING COMPANY, OF  
NEW YORK, N. Y.

MEANS FOR SECURING PRINTING-PLATES TO CYLINDRICAL SURFACES.

SPECIFICATION forming part of Letters Patent No. 604,149, dated May 17, 1898.

Application filed December 7, 1888. Serial No. 292,884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN T. HAWKINS, of Taunton, in the county of Bristol and State of Massachusetts, have invented a new and useful Means for Securing Curved Printing Plates or Blocks to Cylindrical Surfaces, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to secure curved printing plates or blocks to the form-cylinders or cylindrical form-surfaces of printing-machines, so that they may be placed with their edges in close contact with each other, thus making up a continuous printing-surface where desired or held in any other desired relative position on and securely held as so placed.

The invention consists in the means for securing such printing plates or blocks to thin strips of metal either by rivets, screws, or other suitable fastenings, said strips being then strained into close contact with a cylindrical form-surface by any suitable straining device applying tensional strain at their ends—as, for instance, by the device shown in Letters Patent granted to me June 9, 1891, No. 453,862.

In the accompanying drawings, Figure 1 is sectional broken view of a cylindrically-surfaced turtle, bed, or plate-holder, showing the straining device above mentioned, which is fully described in the aforesaid patent, with the plates and holding-strips attached. Fig. 2 is an edge view of a holding-strip, showing the rivets secured in it upon which to cast the printing plates or blocks, the blocks being shown in dotted lines. Fig. 3 is an edge view of a similar strip with punched-up projections formed in it answering the place of the rivets. Fig. 4 is a view in plan of Fig. 3. Fig. 5 is a partial transverse section through a cylindrical turtle or bed, showing the holding-strips laid in circumferential grooves formed therein for their reception.

In said figures the number 1 indicates the turtle or plate-holder with its straining apparatus above mentioned, 2 the plates, and 3 the tying or holding strips.

In the left-hand part of Fig. 1 the blocks 2 are shown as attached to the strips by countersunk-head screws 4, leaving the under side

of the strips flush and smooth, so that the strip, with its attached plates or blocks, may be placed in any desired position upon the cylindrical surface. In the right-hand part of Fig. 1 the turtle or bed is shown grooved for the reception of the head of a button-head screw 5, which may be the most desirable way of securing the plates to the strips 3 for some variety of forms or plates.

The holding-strips 3, as shown in Fig. 2, have rivets 6 permanently fixed in them, the strips and rivets attached being placed in the mold when the plate or block is cast and the plates or blocks cast over the projecting rivet-heads, as shown in dotted lines. In Figs. 3 and 4 the punched-up projections 7 serve the same purpose as the rivets 6.

When desirable, the cylindrical surface upon which the plates are to be held may be circumferentially grooved, as shown in Fig. 5, allowing the holding-strips 3 to lie wholly below the cylindrical surface, in which case the holding-strips 3 may be slotted crosswise for small transverse adjustment of the plates 2 upon the strips 3.

While my invention has been especially designed for securing curved printing-plates to cylindrical surfaces, it is of course obvious that my means may be used to secure plates to plane surfaces.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a printing form or bed having a circumferentially-grooved cylindrical surface, thin tying or holding strips, as 3, provided with means for securing the under sides of printing blocks or plates thereto, and adapted to be strained upon said cylindrical surface, substantially as and for the purposes set forth.

2. The combination of a cylindrical holding-surface, grooves formed therein, straining-strips fitting within said grooves, said cylindrical surface carrying straining means for said strips, said strips carrying a number of printing-plates, substantially as described.

JOHN T. HAWKINS.

Witnesses:

ALBERT J. PARK,  
FRED. A. MERIGOLD.