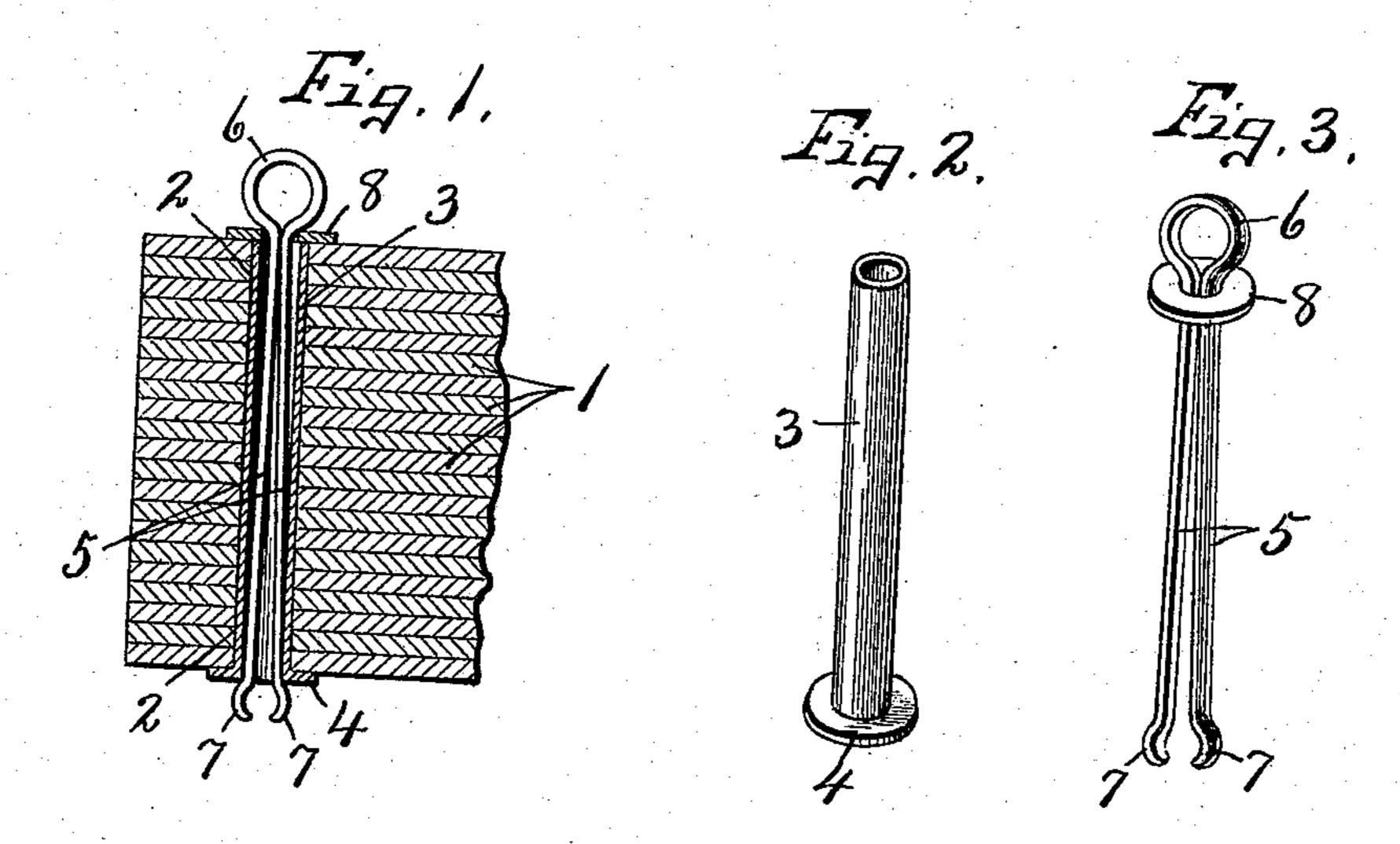
J. J. ALBRECHT. SHOE PATTERN CLAMP. APPLICATION FILED DEC. 24, 1907.

915,925.

Patented Mar. 23, 1909.



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UNITED STATES PATENT OFFICE.

JACOB J. ALBRECHT, OF SYRACUSE, NEW YORK.

SHOE-PATTERN CLAMP.

No. 915,925.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed December 24, 1907. Serial No. 407,982.

To all whom it may concern:

Be it known that I, JACOB J. ALBRECHT, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and 5 useful Improvements in Shoe-Pattern Clamps, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to certain improve-10 ments in clamps for shoe patterns and similar plates which it may be desired to temporarily retain together so that they may be readily swung about a common axis independently of each other and readily separated

15 when desired.

These shoe patterns are usually made of heavy paste board in many different forms, each form being made in different sizes and the particular object of my present inven-20 tion is to enable the user of these forms to keep the several sizes of each particular form together upon a single pivotal pin or sleeve which is passed through alined apertures in the patterns and is held in place by a fric-25 tional locking device capable of being readily removed so that such patterns may be readily separated to enable the workman to select the one desired, said patterns being usually arranged upon the sleeve or spindle in the 30 order of their sizes.

In other words the essential objects of my invention is to provide the patterns with apertures arranged at a definite distance from one end and through which is passed a 35 tubular sleeve having a head at one end while its opposite end is open to receive a split pin capable of being inserted in the open end of the tube and having its opposite sides spring tensioned apart so as to frictionally 40 engage the inner walls of the tube and thereby frictionally lock the pin to the sleeve and still permit it to be readily removed under comparatively light pressure or pull.

Other objects and uses will appear in the

45 following description.

In the drawings—Figure 1 is a longitudinal vertical sectional view of portions of a series of shoe patterns having registered apertures through which is passed my im-50 proved clamp, the sleeve of which is also shown in section while the split pin is shown in elevation. Figs. 2 and 3 are perspective views respectively of the detached sleeve and split pm.

In Fig. 1 I have shown portions of a series

of shoe patterns —1— as provided with registered apertures —2— a fixed distance from one end of the patterns and through which is passed a tubular metal sleeve —3 of a length substantially equal or slightly 60 less than the combined thickness of the plates —1— when resting one upon the other, one end of the tubular sleeve being provided with a head —4— while its other end is open to permit the insertion and with- 65 drawal of a suitable split pin —5—. The sleeve —3— is, in this instance, open from end to end and the pin —5— is preferably of greater length than the length of the sleeve and is divided through its longitudinal cen- 70 ter forming what may be termed a furcated pin having its opposite arms spring tensioned apart so as to frictionally engage the inner walls of the tube through which it passes for frictionally locking the two parts together 75 and still permitting said pin to be quickly and easily withdrawn under a slight pressure or pull upon the head of the pin.

One end of the pin —5— is provided with a suitable head —6— by which it may be 80 manipulated into and out of the sleeve -3-, the opposite end of the spring arms of said pin being bent or slightly deflected laterally from each other at —7— to afford additional frictional resistance against ac- 85 cidental withdrawal from the sleeve.

The distance between the offset portions -7— and head -6— of the pin -5— is slightly greater than the extreme length of the sleeve —3— so that when the pin is forced 90 through the sleeve, the offset portions —7 project beyond the adjacent end of the sleeve -3- and spring apart to afford the additional frictional resistance previously mentioned.

As a further precaution against undue separation of the plates 1, I provide the pin 5 with a washer 8 which may be integral with or separate from the pin 5 and is usually arranged adjacent the head —6— so that the 100 head —4— of the sleeve —3— engages one side of the laminated body while the washer -8- engages the opposite side of the same body thereby holding the plates —1 against undue endwise movement and still 105 permitting them to be rotated about and upon the sleeve —3—.

It will be seen from the foregoing description that the opposite ends of the pin -5are enlarged, one enlargement engaging the 110

outer end faces or head —4— and the other enlargement engages the outer face of the washer —8— thereby frictionally locking the sleeve and pin to each other against accidental axial movement relatively to each other.

The purpose in allowing the furcated end of the pin —5— to project beyond the adjacent end of the sleeve —3— is first to afford additional resistance against withdrawal of the pin and second to enable this end of the pin to be pressed against any available stationary body for the purpose of partially withdrawing the pin from the sleeve, the remaining operation of withdrawal being performed by the operator by taking the head —6— between the fingers and pulling the same upwardly or outwardly out of engagement with the sleeve.

What I claim is:

A shoe pattern clamp comprising a tubular sleeve flanged at one end and adapted to extend through the patterns, a washer mounted upon the other end of the sleeve, and a split pin having an enlarged head engaging with 25 said washer, the arms of said pin extending through said sleeve, the free ends of the arms of said pin enlarged for engagement with the flange of the sleeve whereby the pin is coupled to the sleeve and the washer 30 maintained in position for securing the patterns upon the sleeve.

In witness whereof I have hereunto set my hand this 20th day of December 1907.

JACOB J. ALBRECHT.

Witnesses:

H. E. CHASE, C. M. McCORMACK.