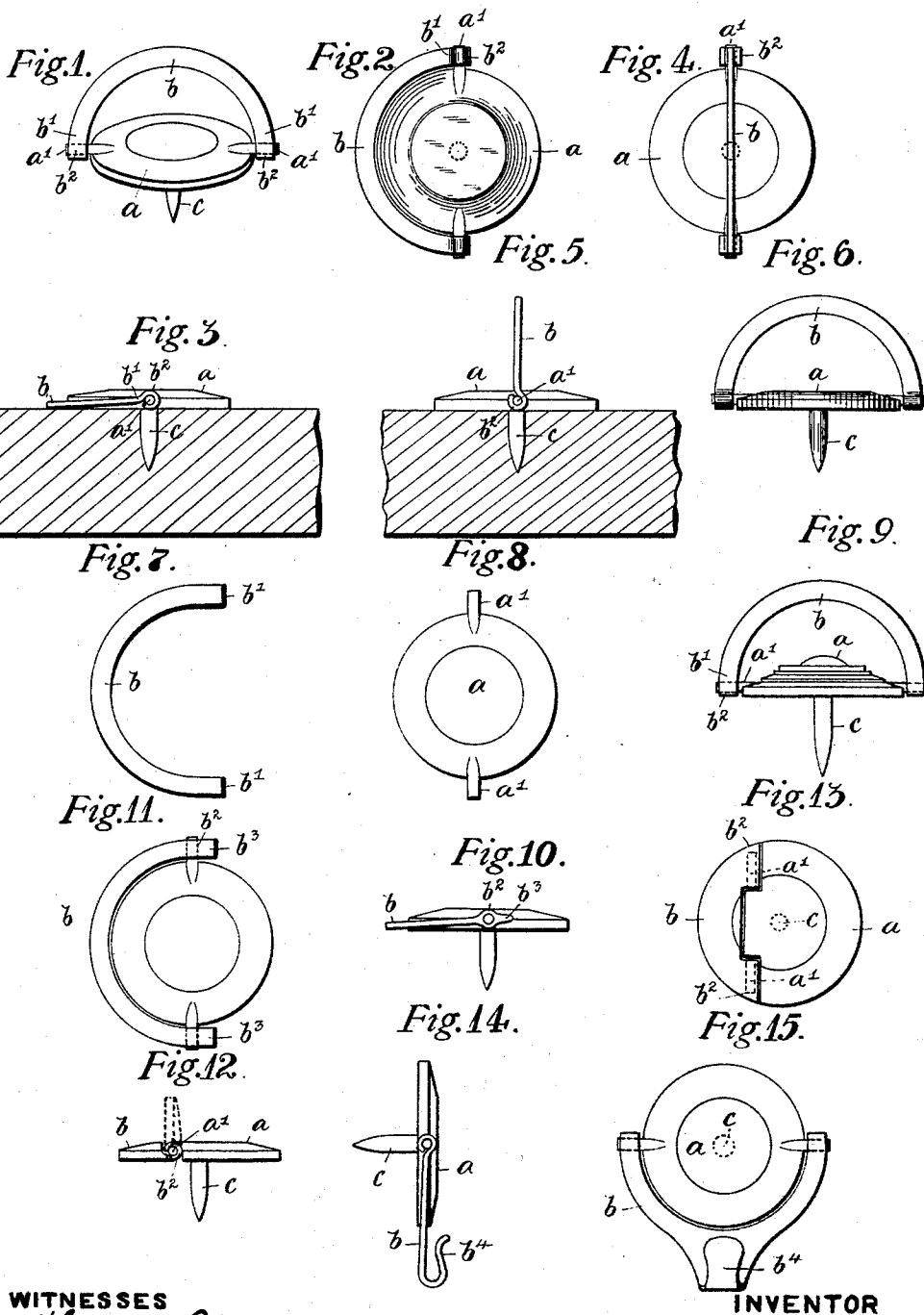


(No Model.)

A. A. WOODWARD.
THUMB TACK.

No. 524,660.

Patented Aug. 14, 1894.



UNITED STATES PATENT OFFICE.

ALFRED AUGUSTUS WOODWARD, OF BIRMINGHAM, ENGLAND.

THUMB-TACK.

SPECIFICATION forming part of Letters Patent No. 524,660, dated August 14, 1894.

Application filed December 30, 1893. Serial No. 495,248. (No model.) Patented in England June 30, 1893, No. 12,813.

To all whom it may concern:

Be it known that I, ALFRED AUGUSTUS WOODWARD, manufacturer, a subject of the Queen of Great Britain, residing at Legge Lane, in the city of Birmingham, England, have invented certain new and useful Improvements in Drawing, Drugget, and Like Pins; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the accompanying drawings, which form part of this specification, and for which invention Letters Patent of Great Britain have been granted, bearing date of June 30, 1893, No. 12,813.

My invention relates to improvements in or additions to drawing, drugget and other like affixing pins for the holding down of drawing and other papers, carpets, druggettings and the like, and for upholstery and like purposes, and has for its object primarily, the providing of the said articles with a lifter, handle or pull-out, which is taken hold of when the said pins are required to be taken or removed from their positions when in use. In ordinary pins, no pull-out means are provided, and in order to remove the same, the thumb nail or a pen-knife blade is inserted under them and then the same pried out.

By my invention as hereinafter described, the lifter, which normally lies flush or flat with the top of the head of the pin, is first raised, then taken hold of by the thumb and a finger, a slight twist given to it and then the pin is pulled out of its affixing position.

Figure 1 of the accompanying drawings represents in perspective, a drawing or like pin provided with a jointed or turn-up and turn-down central lifter, pull-out or handle in accordance with one form of my invention.

Fig. 2 represents a top side view of the same, with the lifter in its normal position, when the pin is in use. Fig. 3 is an end edge view of Fig. 2, showing the pin affixing a sheet of paper down upon a board. Fig. 4 represents the jointed lifter raised centrally and vertically above the plane of the pin, and in a position suitable for the same to be taken hold of by a thumb and finger for removal. Fig. 5 represents an end edge view of Fig. 4, with the pin, as in Fig. 3, fixing down a sheet of paper upon a board. Fig. 6 represents a front view of the pin Fig. 5 removed from

the board. Fig. 7 represents the blank of the lifter prior to the ends being turned up into knuckle joints. Fig. 8 represents the head of the pin separately showing the pivot centers of the same, which are made preferably solid with the metal of the said head. Fig. 9 represents an upholstery affixing-down pin.

The same letters of reference indicate corresponding parts in Figs. 1 to 9 of the accompanying drawings.

a is the head or disk top of the pin, having pivot or trunnion centers *a'*, formed from out of the metal of the same, and directed outwardly from the edge at the two opposite sides.

b is a lifter, handle or pull-out, consisting essentially of a semi-circular shaped loop of metal, following one half of the boundary edge of the pin, and with the terminal ends *b'*, turned up into joints *b²*, which take around and turn upon the opposite pivots *a'*, of the head *a*, as joint centers. These said pivot centers, besides constituting the joint centers, also form the connection between the lifter and the pin, the under side of which latter is provided with a spike *c*.

When the pin is in use, the semi-circular lifter loop *b*, lies flat and flush with the head by its own weight, but when the pin requires to be removed, then raise the lifter *b*, upon the joint centers into a central position, and crossing the top side of the head as a diameter. Then take hold of the lifter by the thumb and a finger, when the pin is bodily raised, preferably after the same has been just slightly twisted.

In applying my invention to drugget, upholstery and like heavy-headed pins, I make the lifter or pull-out part proportionately stronger or of thicker metal.

Fig. 10 represents an edge view of a modified form of my invention. Fig. 11 is a top side view of the same. In this arrangement, the joint *b²*, of the pull-out or lifter *b*, has levering extensions *b³*, which come upon the surface, and pries the spike of the pin out when the said lifter is raised.

Fig. 12 represents an edge view of a further form of my invention, and Fig. 13 is a plan of the same. In this modified form of my invention, the lifter, pull-up or handle part is made out of the metal of the head, or

to form a part of the head. It will be observed that this pin has not a central pull, and therefore is not so convenient and efficient as the first described arrangement. *a* is the primary part of the head, *b* is the pull part thereof, jointed at the opposite parts *b*², to pivots *a'*, of the primary head part *a*, and preferably made or cut out of the same by press tools. *c* is the spike. When the pin is required to be removed, turn the lifter or flap *b*, upward upon its joint as represented in Fig. 12, and then bodily pull out the pin after first twisting it.

Fig. 14 represents an edge view and Fig. 15 a plan of a wall pin, with the central and hinged lifter part provided with a suspension hook. *a* is the head, *b* the pull-out or lifter, *b*⁴ the hook and *c* the spike.

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

1. As a new article of manufacture an af-

fixing down pin consisting of a pointed spike or shank, a flat head having oppositely arranged trunnions and a lifter handle or pull out consisting of a semicircular loop pivotally attached to said trunnions and constructed and adapted to lie in the same plane as the head when out of lifting position. 25

2. As a new article of manufacture an affixing down pin, consisting of a pointed spike, a flat head to which said spike is attached and a handle pivotally attached to said head and adapted to lie flush with said head when out of operative position. 30

In testimony that I claim the foregoing I have hereunto set my hand this 18th day of November, 1893. 35

ALFRED AUGUSTUS WOODWARD.

Witnesses:

HENRY SKERRETT,

ARTHUR T. SADLER,

Both of Birmingham.