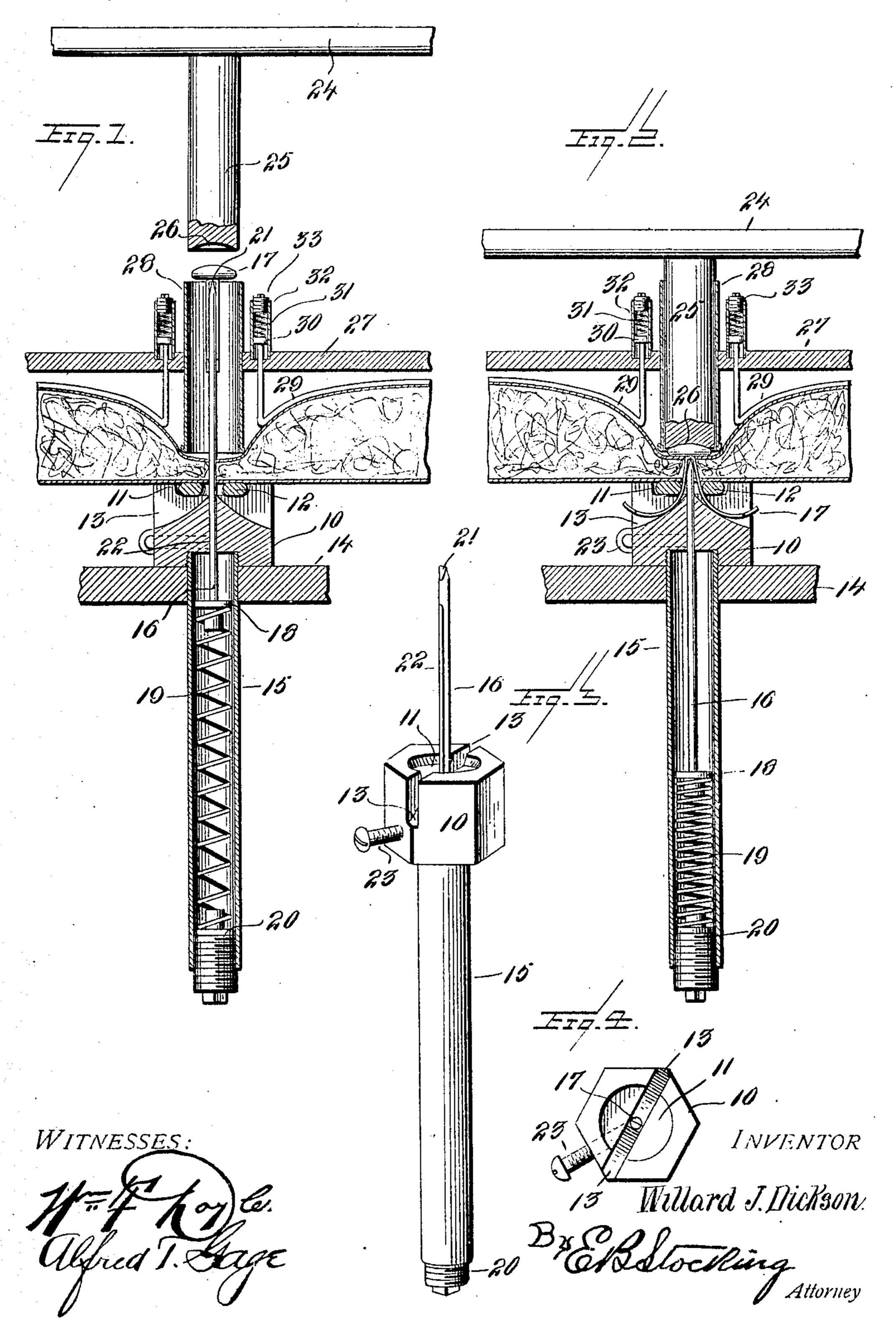
## W. J. DICKSON.

## UPHOLSTERING DEVICE.

APPLICATION FILED MAR. 30, 1908.

916,120.

Patented Mar. 23, 1909.



## UNITED STATES PATENT OFFICE.

WILLARD JAMES DICKSON, OF MANSFIELD, OHIO.

## UPHOLSTERING DEVICE.

No. 916,120.

Specification of Letters Patent.

Patented March 23, 1979.

Application filed March 30, 1908. Serial No. 424,111.

To all whom it may concern:

Be it known that I, WILLARD J. DICKSON, citizen of the United States, residing at tube 15 so that the tension of the spring 19 Mansfield, county of Richland, and State of 5 Ohio, have invented certain new and useful Improvements in Upholstering Devices, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to an upholstering device, and particularly to means for inserting and clenching a button or other fastener through the material to be held thereby.

The invention has for an object to provide 15 a die block having suitable clenching faces and means for supporting a washer together with a movable button support adapted and arranged to support the button prongs in alinement with the clenching surface upon 20 the die block.

Other and further objects and advantages of the invention will be hereinafter fully set forth and the novel features thereof defined

by the appended claims.

25 In the drawing:—Figure 1 is a vertical section showing the button in position for application; Fig. 2 is a similar view showing the button clenched; Fig. 3 is a detail perspective of the device, and Fig. 4 is a plan 30 thereof.

Like numerals refer to like parts in the

several views of the drawing.

The numeral 10 designates the die block which may be of any desired size or configura-35 tion and is provided upon its upper face with a recess 11 adapted to receive an apertured washer or securing disk 12, as shown in Fig. 1. At diametrically opposite points from the center of this recess the clenching 40 faces 13 extend in a curved line downward therefrom, and the arc of said curve may be varied depending upon the length and character of prong to be clenched. While two of these faces are herein shown, still the 45 number may be multiplied as found desirable. This die block is supported in any desired manner, for instance, upon the base 14 and depending therefrom is the tube 15 adapted to receive the supporting rod 16 for 50 the button 17. The rod is provided with a head 18 within the tube 15 adapted to receive the upper end of the coiled supporting spring 19, the lower end of this spring bearing in ling faces of the die and the pressure means

contact with the screw block 20 which is adjustably mounted in the lower end of the 55 may be varied as found desirable or convenient. The upper end of the supporting rod 16 is provided with a bevel face 21 over which the button 17 is disposed, as shown in 60 Fig. 1, the bevels being in alinement with the clenching faces 13 of the die block to insure the proper positioning of the button prongs. This rod is also provided with an angular face 22 (Fig. 3) which travels in contact with 65 an adjustable screw 23 mounted in the die block to prevent a rotative movement of the rod 16 which would throw the bevel point 21 out of alinement with the faces 13. This rod is yieldingly supported so that the two 70 prongs of the button carried thereby are brought into contact with the die block, but if it be desired to rigidly hold the rod for any purpose, such as punching material therewith, the screw 23 may be tightened in its contact 75 therewith.

The pressure upon the button may be applied in any desired manner, either manually or mechanically, and for that purpose there is here shown a head plate 24 having a punch 80 25 with a recessed face 26 to engage the head of the button. The material forming the upholstery may also be held in position in any desired manner, but a preferable construction for this purpose comprises the pressure board 85 27 which supports a tube 28 in alinement with and surrounding the recess of the die block. For the purpose of yieldingly supporting the material between the points where the buttons or securing devices are applied, a 90 curved former frame 29 is supported from the board 27 and held relative thereto. With this object the head 30 thereof is disposed within the case 31 containing a tension spring 32 upon which the pressure may be 95 adjusted by the set screw 33.

In the operation of the invention, the washer or fastener is first disposed in the recess of the die block and the lower fabric or material is placed in position with the sup- 100 porting rod extending therethrough. The packing and material is then properly disposed and held in position by the pressure or forming board. The buttons are then placed on the points in proper relation to the clench- 105

brought in contact therewith so that the prong of the button follows the rod in its downward travel passing through both the material and the eye of the washer until 5 these prongs engage and are bent outward by the clenching faces on the die block. It will be understood that a plurality of these devices are disposed in suitable relation to each other so that the operation may be si-10 multaneously performed. The forming devices lay and produce the pleat under the spring pressure so as to secure an even amount of fullness in each of the tufts and the equal packing thereof when subjected to the 15 pressing action. Under such condition a tuft which contains more material than another would get the greatest pressure, but the springs produce an equal pressure at all points thus retaining a uniform article. 20 The tube carried by the frame guides and retains the buttons against displacement thus providing a structure requiring the minimum of time for operation and having the most efficient results.

Having described my invention and set forth its merits, what I claim and desire to

secure by Letters Patent is:—

1. An upholstering device comprising a die block having a flat supporting surface 30 and oppositely disposed clenching walls extending radially downward from said surface, and a retractable support mounted in said block and having guide faces for button prongs disposed in alinement with said clench-35 ing walls.

2. An upholstering device comprising a die block provided with oppositely disposed clenching ways extending radially from the center thereof, a yieldingly supported rod 40 extending centrally through said block, and means for holding said rod against rotative

movement.

3. An upholstering device comprising a die block provided with separated clenching 45 faces disposed at opposite sides thereof, a yieldingly supported rod extending centrally through said block, means for holding said rod against rotative movement, and a point upon said rod having opposite beveled faces 50 disposed in alinement with the clenching faces of the block.

4. An upholstering device comprising a die block provided with oppositely disposed clenching faces, a yieldingly supported rod 55 extending centrally through said block, and a pressure plate provided with a tube sur-

rounding said rod.

5. An upholstering device comprising a die block provided with oppositely disposed 60 clenching faces, a yieldingly supported rod extending centrally through said block, a pressure plate provided with a tube surrounding said rod, and a clenching punch disposed to traverse said tube.

die block provided with oppositely disposed clenching faces, a yieldingly supported rod extending centrally through said block, a pressure plate provided with a tube surrounding said rod, a clenching punch dis- 70 posed to traverse said tube, and a yieldingly mounted former carried by said pressure plate.

7. In an upholstering device, a die block provided with opposite radially disposed 75 clenching faces and a central aperture therethrough, a tube disposed in alinement with said aperture, a supporting rod extending through said block and provided with a head within said tube, a closure for the opposite 80 end of said tube, a supporting spring extending from said closure to said head, means carried by said block to prevent rotation of said rod, and means for adjusting said tube closure.

8. In an upholstering device, a die block provided with a flat upper face and radially disposed clenching ways extending in opposite directions downward from the center of said face, and a yieldingly mounted sup- 90 porting rod extending centrally through said block.

9. In an upholstering device, a die block provided with a recess in its upper face and clenching ways extending in opposite direc- 95 tions from the center of said recess, a yieldingly mounted supporting rod extending centrally through said block and having guide faces in alinement with said ways, and an angular face extending longitudinally 100 thereof, and an adjusting screw mounted in said block to engage said angular face of said rod.

10. In an upholstering device, the combination with a clenching die, of a coöperating 105 punch member and pressure plate, and forming devices yieldingly supported by said plate at opposite sides of the die member.

11. In an upholstering device, the combination with a clenching die, of a coöperating 110 punch member and pressure plate, forming devices yieldingly supported by said plate at opposite sides of the die member, and a tube carried by said plate in alinement with the die and punch.

12. In an upholstering device, the combination with a clenching die, of a coöperating punch member and pressure plate, forming devices yieldingly supported by said plate at opposite sides of the die member, a head 120 extending from said forming devices and disposed within a casing carried by said plate, and a spring mounted in said casing to bear under tension against said head.

13. In an upholstering device, a die block 125 provided with a recess in its upper face having a flat supporting surface and opposite radially disposed downwardly inclined clenching ways extending downward from 6. An upholstering device comprising a the center of said recess, and a yieldingly 130

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mounted supporting member having opposite button holding ways in alinement with

the clenching faces of the die block.

14. In an upholstering device, a die block 5 provided with a recess in its upper face having a flat supporting surface and opposite radially disposed downwardly inclined clenching ways extending from the center of said recess in combination with a central

supporting member above said surface having button holding faces in alinement with said ways.

In testimony whereof I affix my signature

in presence of two witnesses.
WILLARD JAMES DICKSON.

Witnesses:

FREEMAN A. BROWN, JOHN A. WILEY.