

No. 882,326.

PATENTED MAR. 17, 1908.

R. S. LEWIS.  
MITTEN PRESSING MACHINE.

APPLICATION FILED JULY 3, 1907.

2 SHEETS—SHEET 1.

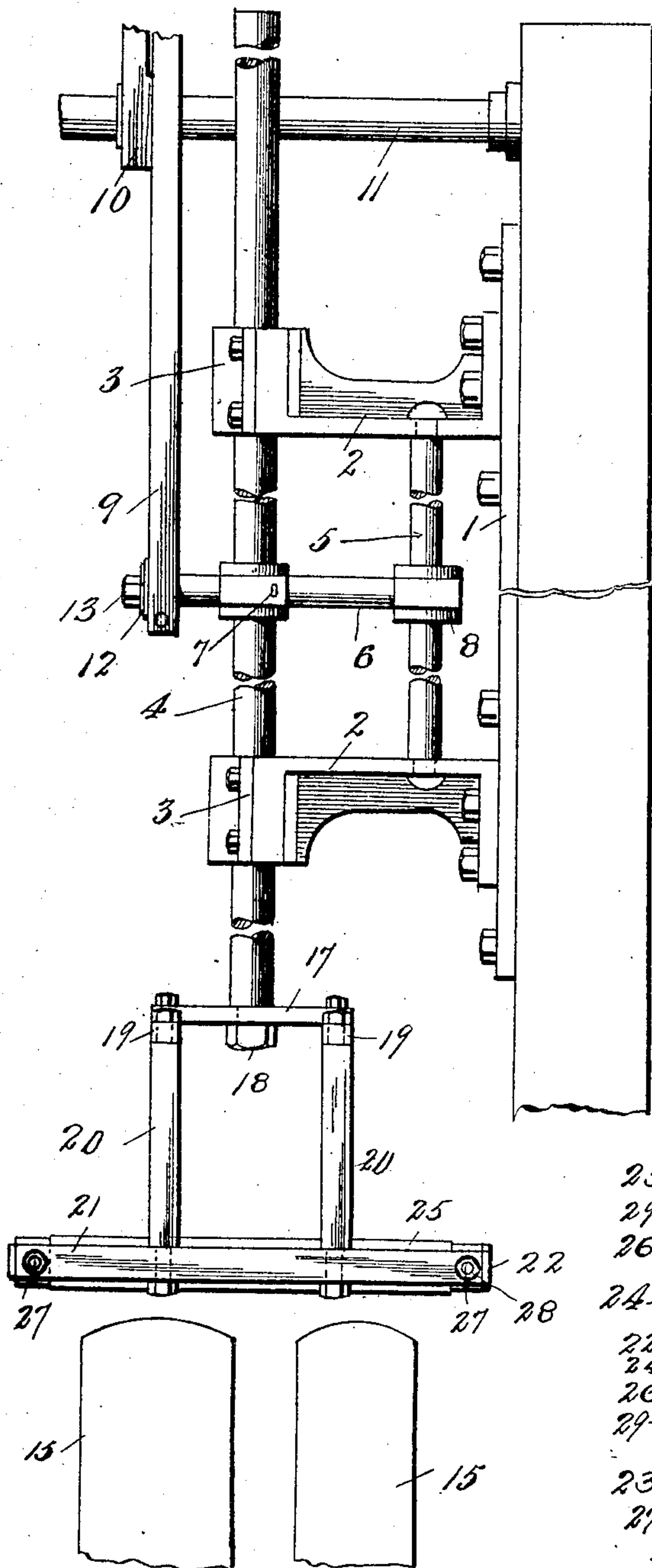


FIG. 1.

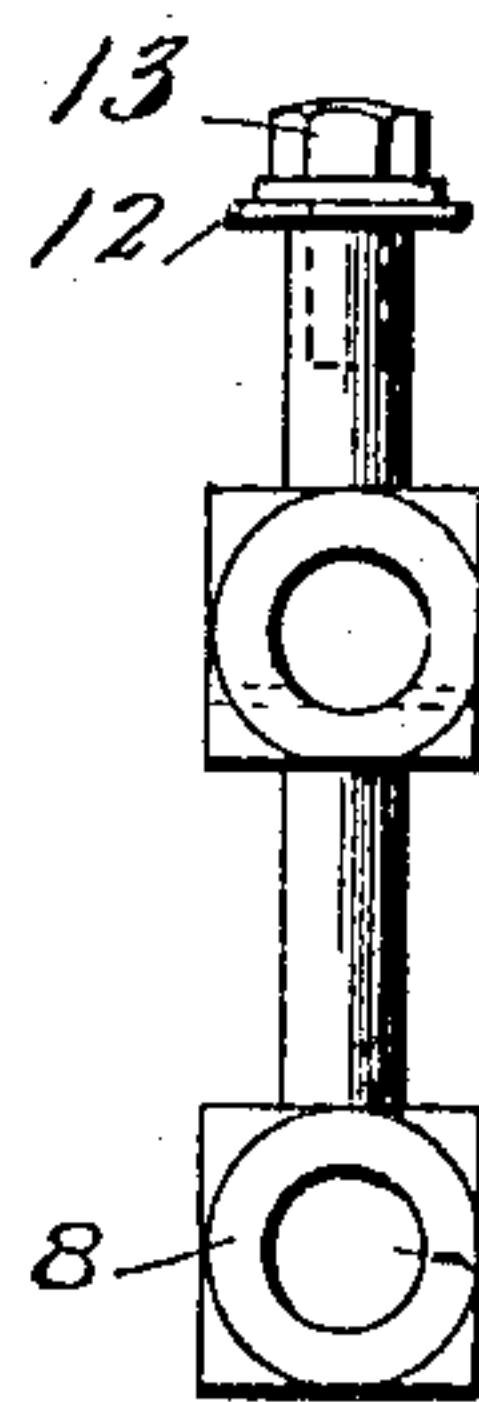


FIG. 5.

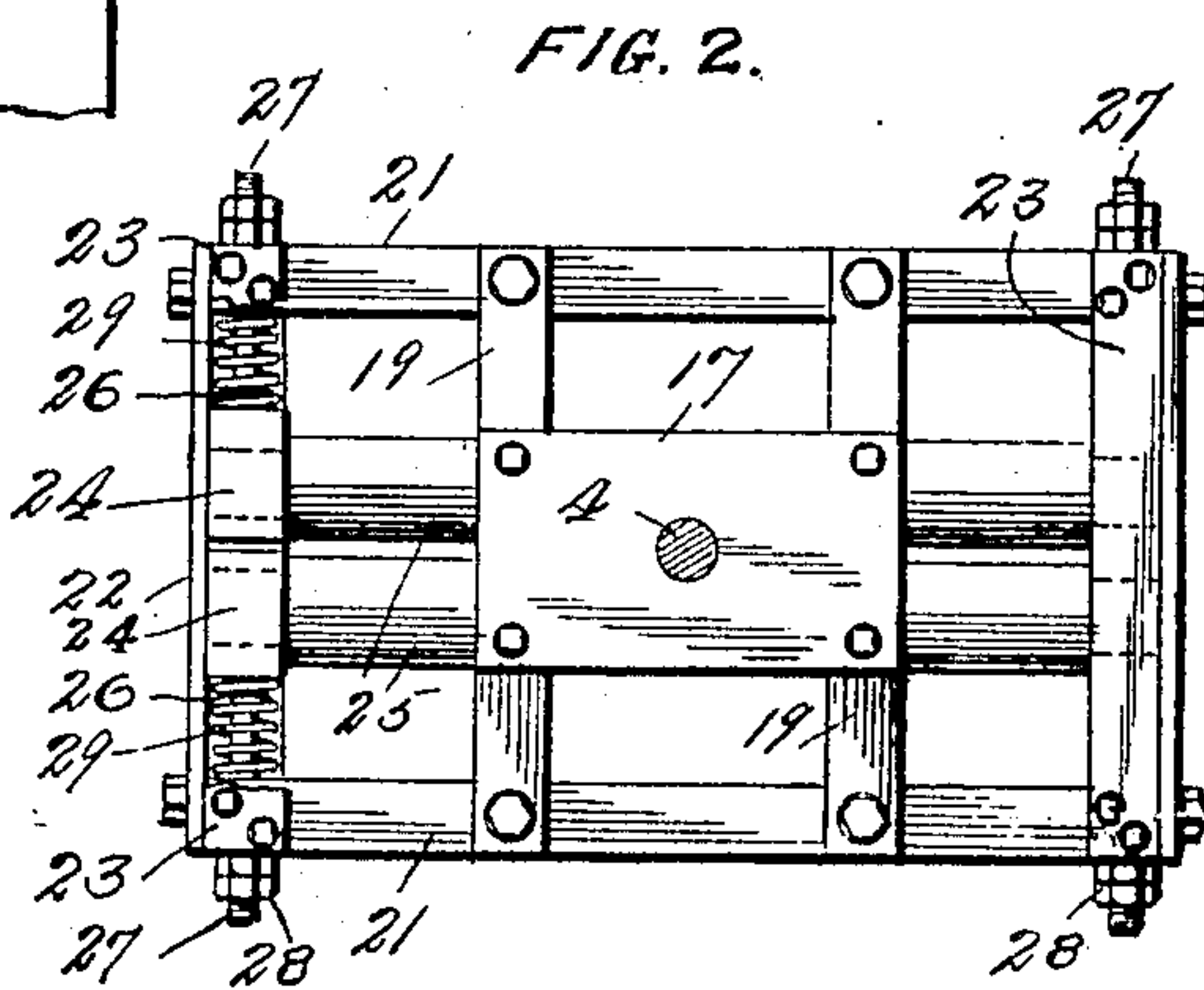


FIG. 2.

Witnesses  
C. R. Davis,  
Atty. in Law

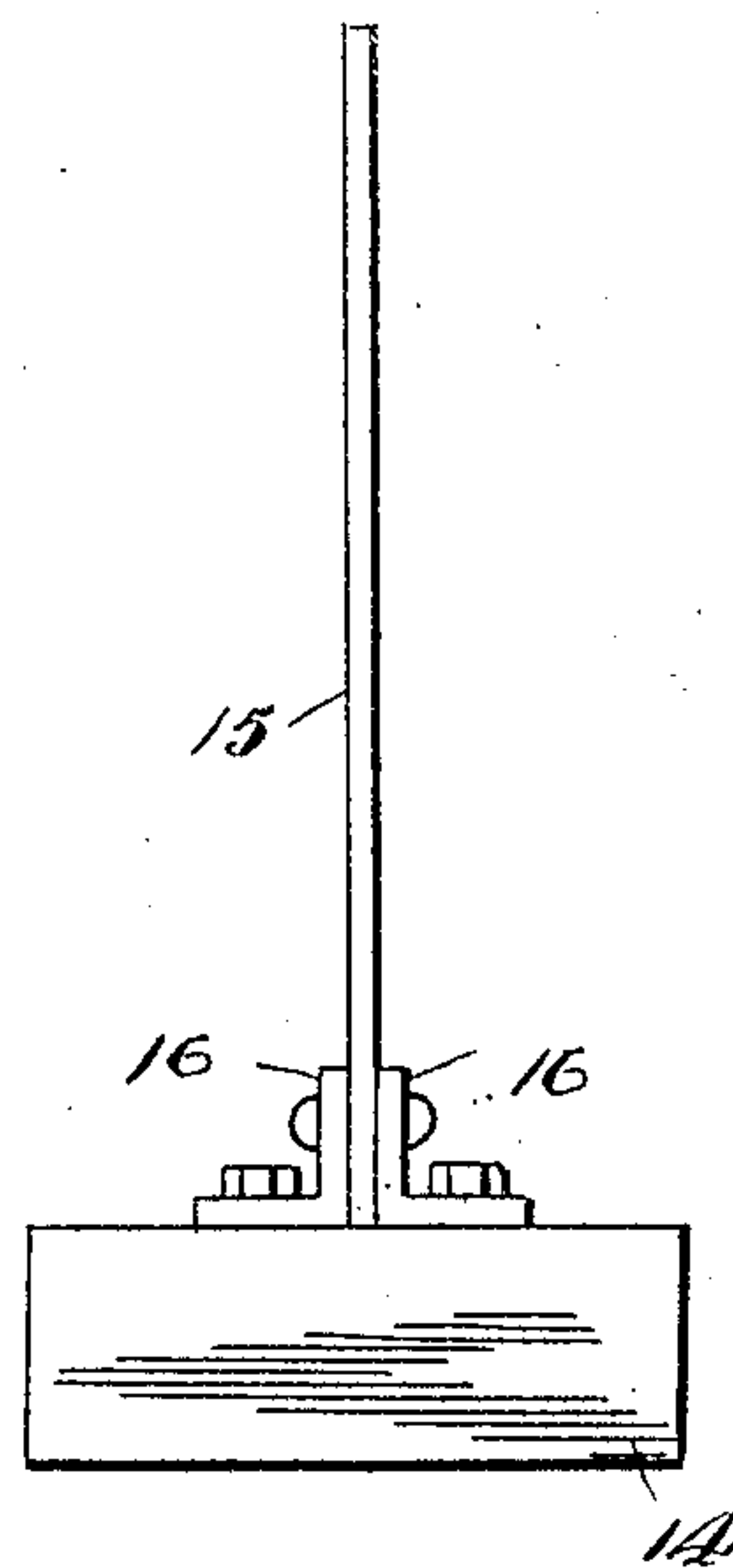
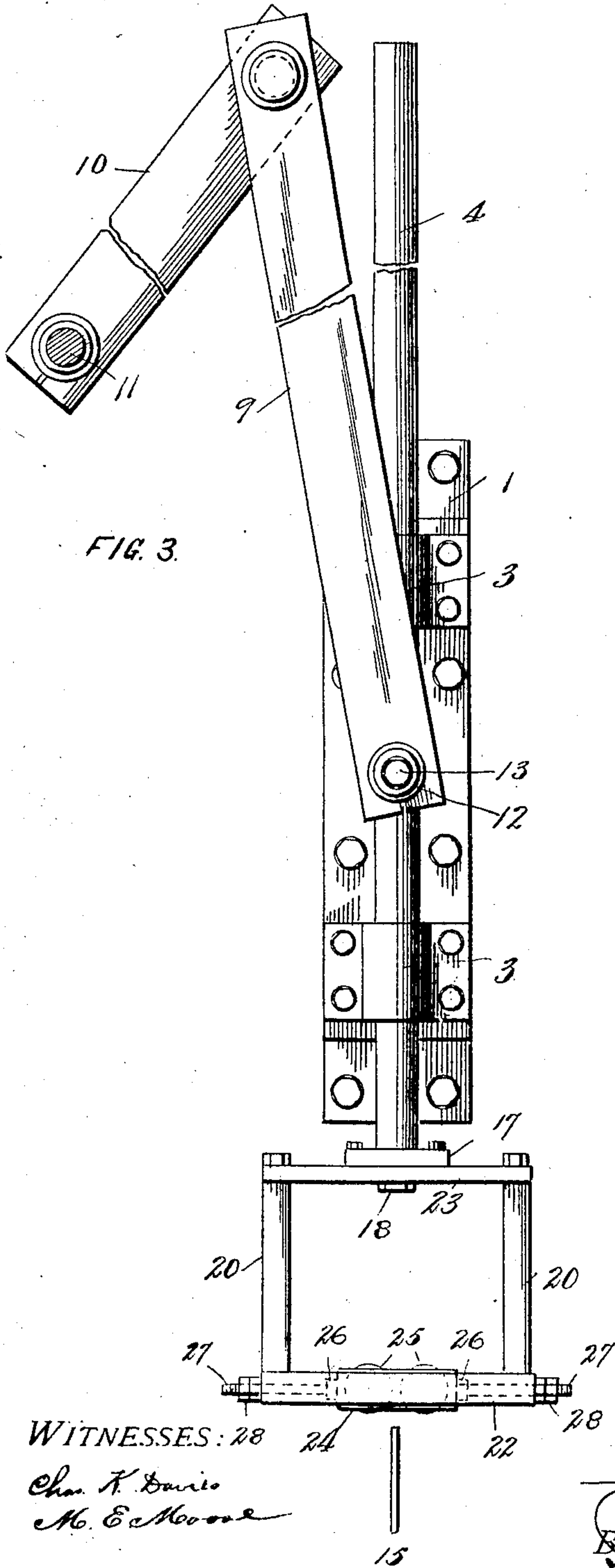
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2 SHEETS—SHEET 2.



WITNESSES: 28

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W. E. Moore

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BY

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# UNITED STATES PATENT OFFICE.

RANSOM S. LEWIS, OF OMAHA, NEBRASKA.

## MITTEN-PRESSING MACHINE.

No. 882,326.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed July 3, 1907. Serial No. 382,099.

*To all whom it may concern:*

Be it known that I, RANSOM S. LEWIS, a citizen of United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Mitten-Pressing Machines, of which the following is a specification.

My invention relates to improvements in pressing machines, and has for its object the provision of a device designed particularly for the shaping and forming of woolen and cloth mittens which shall be simple and durable in construction, shall perform its functions in a satisfactory manner, and which shall be practical and efficient in every particular.

Another object of my invention is the provision of a device for shaping articles of apparel which shall perform the pressing operation in but the one motion, and which may be operated either by hand or power with the expenditure of but slight energy.

With these and other objects in view, my invention consists of a former over which the article to be shaped is placed, and shaper rolls which are adapted to engage both sides of the former.

My invention further consists of a shaping and pressing machine embodying certain other novel features of construction, combination and arrangement of parts substantially as disclosed herein and as illustrated in the accompanying drawings, in which:

Figure 1, is a side elevation of my improved pressing machine. Fig. 2, is a plan view of the reciprocating presser frame with parts broken away to illustrate the manner in which the rolls are adjustably journaled in the frame. Fig. 3, is a front elevation of the machine. Fig. 4, is an end elevation of one of the pressing standards showing the mounting therefor, and Fig. 5, is a detail view of the reciprocating crank pin.

After the cloth or woolen mittens have been made on the sewing machine or knitting machine, they are then in the rough and are not properly formed, shaped or straightened out, so that after leaving the sewing or knitting machine, it is necessary to press and shape the mittens. Formerly this work of pressing and shaping has been done by hand, at best a tedious and slow process, but by the aid of my improved machine, the work is ac-

complished by mechanical means with a great saving of time and labor.

In the drawings: the numeral 1, designates the base or wall plate of the machine which is secured in an upright position as shown. Upon the wall plate are mounted the pair of outstanding brackets 2, carrying the alining journal boxes 3, in their outer ends in which the vertical shaft 4, is adapted to reciprocate. A guide post 5, is also secured between the outstanding brackets parallel to the vertical shaft.

A rod 6, is secured transversely on the vertical shaft by means of the key or set screw 7, the rod having a rearwardly extending portion terminating in a collar or sleeve 8, which has sliding engagement on the guide post. The forward extended end of the rod serves as a crank pin for reciprocating the vertical shaft, a connecting rod 9, having its one end engaged upon the crank pin and its opposite end connected to the crank lever 10, which is mounted upon the main or driving shaft 11. This driving shaft may be either a rotatable or a rock shaft, and the latter construction is illustrated in the drawings as being the preferred form. Thus as the driving shaft rocks, the crank lever and connecting rod impart a vertical reciprocating motion to the vertical shaft. The main shaft may be driven by any suitable power and a number of the pressers may be operated in series from the main shaft. The shaft may be caused to reciprocate from the main driving shaft by means of any other suitable connection such as an eccentric and eccentric strap, a lever or other connection. The washer 12 and securing bolt 13, serve to hold the connecting rod in position upon the crank pin.

A table or other horizontal support 14, is arranged beneath the vertical shaft, and mounted on said table are the vertical standards 15. These standards are in the form of flat upstanding plates having their upper ends rounded to the proper curvature for the ends of the mittens. Angular brackets 16, serve to secure the base of the standards upon the table.

A rectangular plate 17, is secured upon the lower end of the reciprocating shaft by means of the nut 18, or other fastening means, and secured to said plate, are the supporting cross bars 19. Depending from



said cross bars are the rods or posts 20, to the lower ends of which is secured the presser frame. The presser frame comprises the longitudinal side members 21, the end strips 5 22, and the cross strips 23, secured to the upper and lower faces of the frame adjacent the end strips. Journal blocks 24, are slidably mounted at the ends of the frame confined between the cross strips 23. A pair of 10 pressing rollers 25, have their reduced ends journaled in the journal blocks, the rollers being located so as to pass down over the standards on each side thereof. The standards may be of slightly wedge or tapering 15 construction if desired to insure a close fit of the rollers. The journal blocks each have a boss or neck extension 26, on their outward sides, in which are secured the adjusting bolt rods 27, said bolt rods extending through the 20 side members of the frame and having adjusting nuts 28, on their outer extended ends, so that by adjusting the bolt rods, the journal boxes for the rollers may be shifted and the rollers be properly spaced in the 25 frame. Springs 29, may be confined between the roller journal boxes and the side members of the frame to cause the rollers to exert the proper pressure on the standards or formers. Two or more standards may be 30 employed in connection with each machine and one of these standards may be made larger than the other as shown to accommodate articles of different sizes. The standards or formers may also be mounted upon 35 the table or support in such manner as to be readily detached therefrom to permit the substitution of formers of different size and shape.

In operation the mittens are placed over 40 the standards, and as the main shaft revolves, by means of the connections described, the vertical shaft is caused to reciprocate carrying with it the presser rolls which pass down over the standards, forcing 45 the mittens downward over the standards. The ends of the mittens are thereby rounded to the curvature of the formers and are flattened out to proper shape for packing. The mittens are thus pressed and 50 shaped by the single reciprocating action of

the rollers over the formers. By altering the shape of the formers, other articles may be pressed and shaped in the same manner.

From the foregoing description taken in connection with the drawings, the operation 55 and advantages of my improved pressing device will be readily understood and appreciated, and it will further be evident that I have produced such a device which fully and satisfactorily accomplishes all the results 60 herein set forth as the objects of my invention.

I claim:

1. A presser comprising standards of desired shape, a reciprocating member, co-acting 65 rollers carried by the reciprocating member to engage the standards and means for operating the reciprocating member.

2. A shaping machine comprising formers, a reciprocating member, crank mechanism 70 for operating the same a frame carried by the reciprocating member, and adjustably mounted co-acting rolls journaled in the frame to pass on each side of the formers.

3. A pressing machine comprising flat up- 75 right formers, a reciprocating shaft, means for operating said shaft, a frame carried by the shaft, and coacting presser rolls journaled in the frame and adapted to pass down over the formers. 80

4. The combination with a reciprocating shaft and means for operating the same, of formers, a frame carried by the shaft, and coacting presser rolls adjustably mounted 85 in the frame and adapted to engage the formers.

5. A mitten shaping machine comprising formers, a reciprocating member and a frame carried thereby, journal blocks slidably 90 mounted in the frame, springs tending to force the journal blocks together, and co-acting rolls mounted in the journal blocks to engage the formers.

In testimony whereof I affix my signature in presence of two witnesses.

RANSOM S. LEWIS.

Witnesses:

MYERS B. LEWIS,  
J. W. MARTIN.