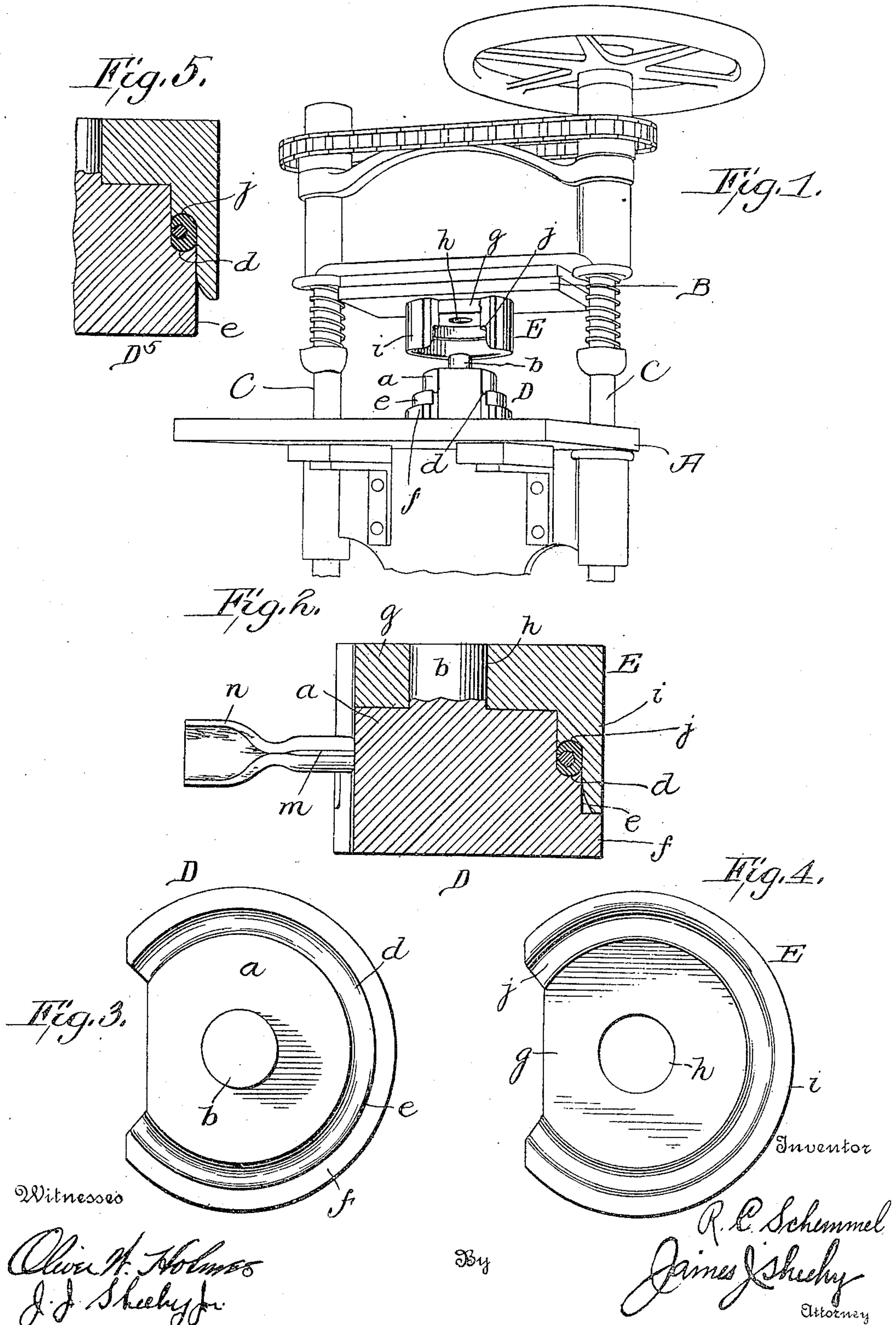


R. C. SCHEMMEL.
LEATHER WORKING DIE.
APPLICATION FILED FEB. 21, 1910.

958,324.

Patented May 17, 1910.



UNITED STATES PATENT OFFICE.

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LEATHER-WORKING DIE.

958,324.

Specification of Letters Patent.

Patented May 17, 1910.

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To all whom it may concern:

Be it known that I, ROBERT C. SCHEMMEL, a citizen of the United States, residing at Union City, in the county of Randolph and State of Indiana, have invented new and useful Improvements in Leather-Working Dies, of which the following is a specification.

My invention has to do with the formation of shaft straps, pole straps, automobile straps and analogous leather articles; and it has for its object to provide a die through the medium of which straps such as described may be formed and given the curvature desired without the formation of wrinkles and kinks on the inside thereof, and also in such manner that the pressure exerted on one of the die members in forming the strap, stiffens the leather and adds to the strength of the strap in much the same manner as the stock of a shoe sole is hardened by hammering thereof.

My invention will be best understood by reference to the following description when taken in connection with the accompanying illustration of one specific embodiment thereof, while its scope will be more particularly pointed out in the appended claim.

In the drawings which are made a part hereof: Figure 1 is a view showing the members of my novel die as separated and also showing said members as carried by a machine adapted to move one member toward and from the other, and also adapted to hold the first-named member under pressure against such other. Fig. 2 is a vertical section taken through the die members when the die is closed, and showing a strap properly positioned in the die. Fig. 3 is a plan view of the lower or male die member. Fig. 4 is an inverted plan view of the upper or female die member. Fig. 5 is a fragmentary view illustrative of a slight modification hereinafter referred to in detail.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A, Fig. 1, is a table comprised in a machine adapted for the operation of my novel die.

B is a head disposed above and movable toward and from the said table, and C C are rods connected with the head B and guided in the table A and designed to be connected with means for moving the head

toward and from the table, which means forms no part of my invention and is therefore not illustrated herein. I would also have it understood at this point that the table A and the head B do not form part of my present invention, inasmuch as one of my novel die members may be moved toward and from and held under pressure against the other by any suitable means consonant with the function of the die members.

In the illustrated embodiment the male die member D is suitably fixed on the table A, and the female die member E is connected with and carried by the head B so as to be moved by the same down upon and up from the male member.

As best shown in Figs. 2 and 3, the male member D which is formed of steel or other suitable material, comprises a body *a*, a guide post *b* rising therefrom, a seat *d* of concave form in cross-section, which extends partially or entirely around the body and is supported by the enlarged body portion *e*, and a base flange *f* which extends outward beyond the portion *e* and is designed to rest beneath the female member E when the die is closed.

It is obvious of course that the male member D may be of the shape illustrated in outline or of any other shape compatible with the purpose of my invention without involving departure from the spirit thereof.

The female member E is provided in its top *g* with an aperture *h* to receive the post *b* when the die is closed, and is also provided with a depending or skirt flange *i*. On the inner side of this skirt flange *i* an abutment *j*, of concave form in cross-section, is provided, which abutment is backed by solid metal, and conforms in shape to the seat *d* of the male member D, and is designed to be opposed to the said seat *d* when the die is closed so as to hold and press the strap to be formed and fix the same in the shape desired. It will also be here noted that when the die is closed the lower end of the skirt flange *i* on the member E brings up against the base flange *f* on the male member D and in that way limits downward movement of the member E and prevents the imposition of excessive pressure on the strap.

In the practical use of my novel die, the strap, which is preferably made up of a filler strip *m* arranged in and connected to a cover strip *n* which is bent in the direction

of its width on the filler strip, is bent around the upper portion of the body *a* of the member D which portion serves as a mandrel, and is disposed in the seat *d* of said member.

5 Then while the operator grasps and holds the end portions of the strap to retain the same in the position illustrated, relative to the member D, the female member E is brought down over the male member and
10 pressed and held against the strap and the said male member, with the result that the strap will be fixed in a loop-shape, and at the same time will be pressed and hardened, as well as rendered finished in appearance,
15 and this without the formation of any kinks on the inside of the strap or any other features liable to detract from the strength or the finished appearance of the strap.

While I have shown and described one
20 form of my invention, it is to be understood that I am not limited to the details or the form or relative arrangement of parts disclosed, but that modifications may be made therein without departing from the spirit
25 thereof. For instance the base flange *f* on the male member, as shown in Figs. 1-3, is entirely unnecessary and may be altogether omitted, leaving the male member D⁵ as shown in Fig. 5 without any abutment op-
30 posed to the skirt flange of the female member, this being advantageous inasmuch as it

obviates the liability of part of a heavy strap being sheared off and caused to clog between the base and skirt flanges.

I would also have it understood that the 35 members may be guided rectilinearly relative to each other by any means other than the post *b* disposed in the aperture *h* without affecting my invention.

Having described my invention, what I 40 claim and desire to secure by Letters-Patent, is:

A die for the purpose described, comprising a male member having a mandrel portion, and a seat at the side of the lower part 45 of said mandrel portion, which seat is open at its outer side, and a female member having a skirt flange disposed to receive the mandrel portion and seat of the male member and form the outer wall of the seat and 50 extend below said seat, and also having a seat at the inner side of the said skirt flange and arranged to be opposed to the seat of the male member when the die is closed.

In testimony whereof I have hereunto set 55 my hand in presence of two subscribing witnesses.

ROBERT C. SCHEMMEL.

Witnesses:

JESS. POTTER,
MAY KNOLL.