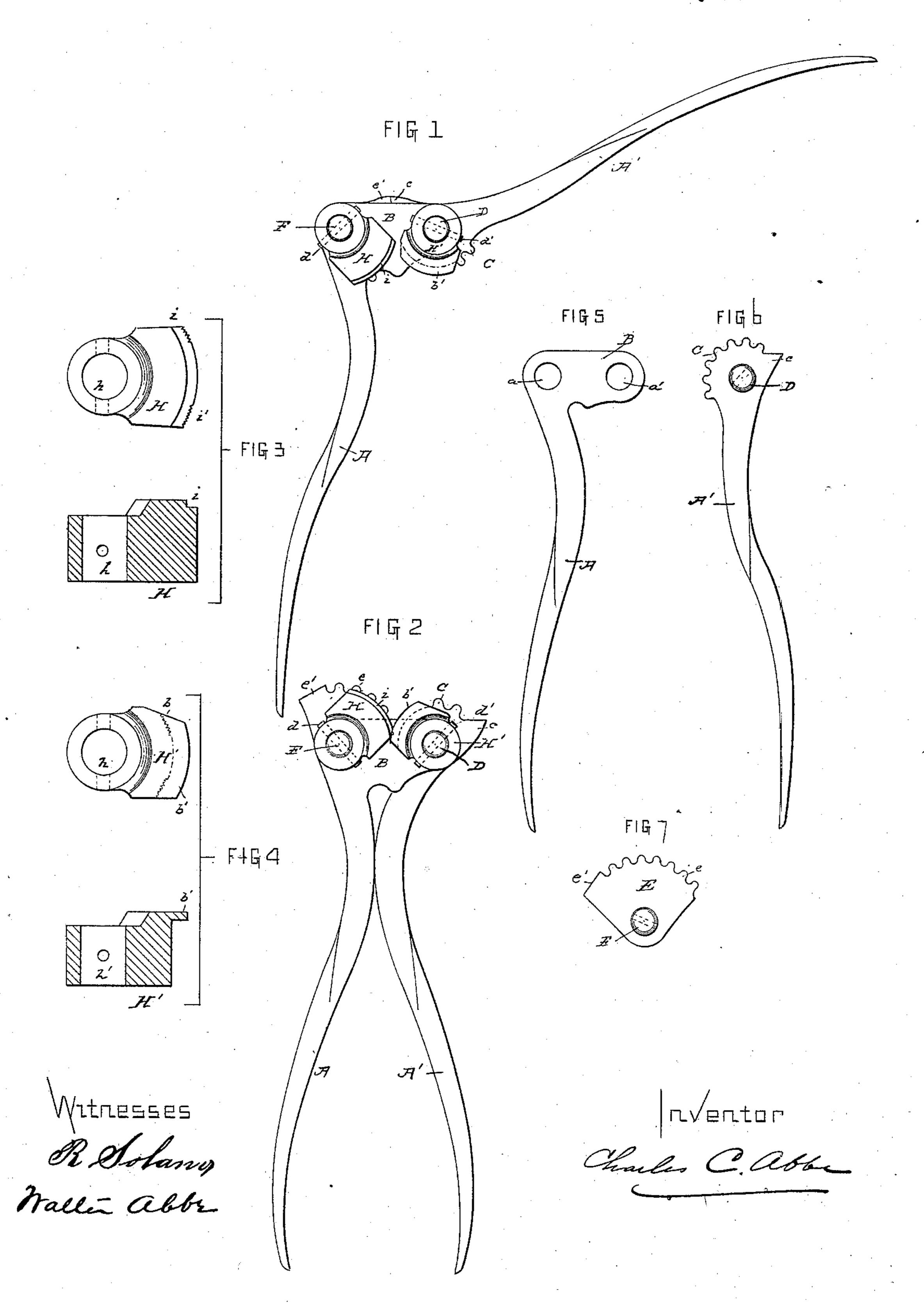
C. C. ABBE.

SEAL PRESS.

No. 366,193.

Patented July 5, 1887.

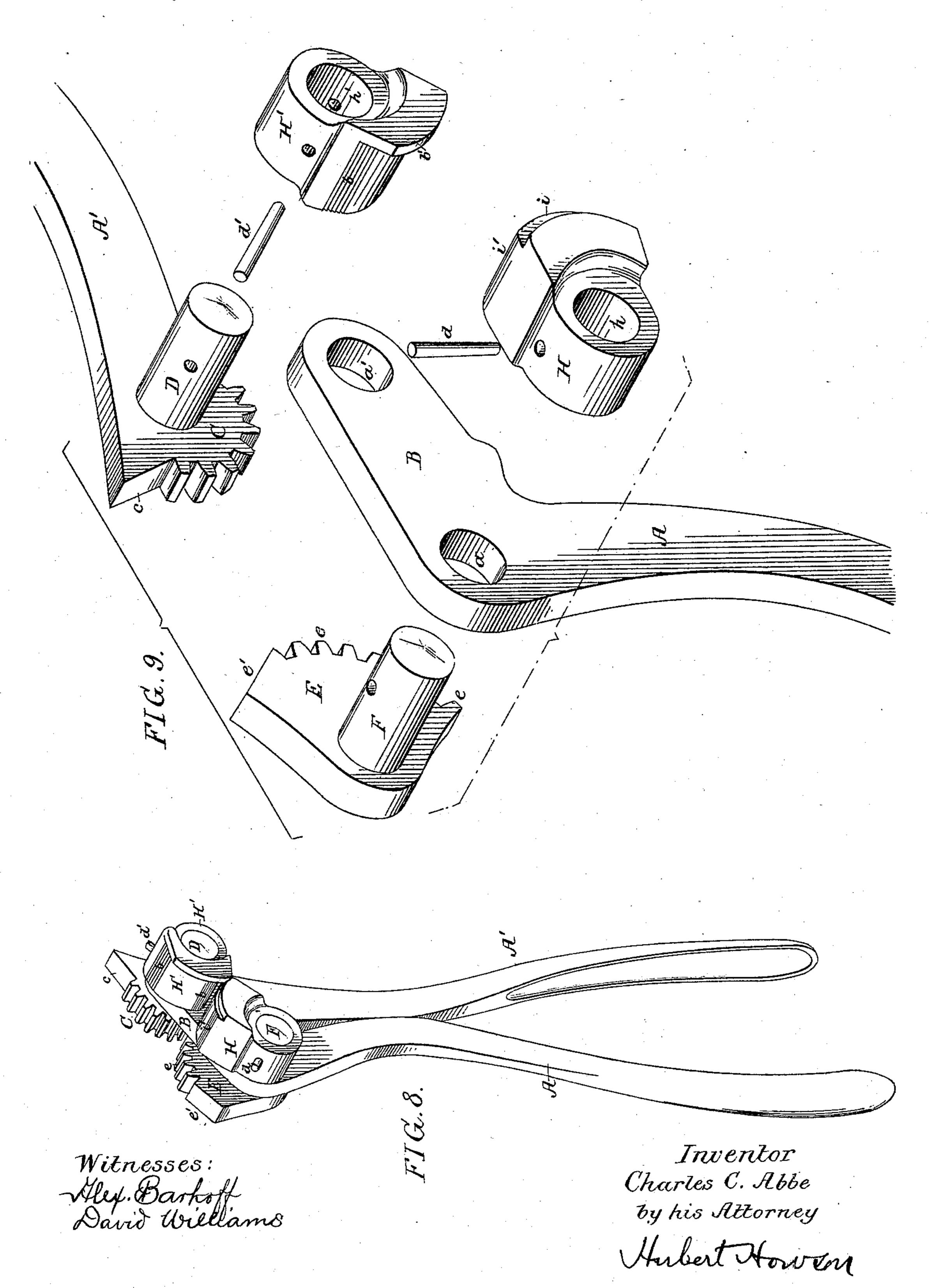


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United States Patent Office.

CHARLES C. ABBE, OF NEW YORK, N. Y.

SEAL-PRESS.

SPECIFICATION forming part of Letters Patent No. 366,193, dated July 5, 1887.

Application filed September 26, 1885. Serial No. 178,242. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. ABBE, a citizen of the United States, residing in Brooklyn, Kings county, New York, have invented 5 certain Improvements in Presses, of which the

following is a specification.

My invention relates to the construction of that class of portable hand presses which have rolling dies, and which are more especially 10 adapted for impressing the soft-metal seals commonly used for securing freight and other cars and boxes.

The main objects of my invention are to so construct the press that the seal and its wire 15 can be more readily inserted between the dies; that the press can be used in close contact with the car, box, or other article; that it will be powerful and yet occupy a comparatively small space; that the strain on the rolling dies 20 will be counteracted by the gearing and be taken up by the bearings, and that accidental breakage of the tool by careless handling will be prevented.

In the accompanying drawings, Figure 1 is 25 a side view showing the parts in the open position ready for the insertion of the material to be pressed. Fig. 2 is a similar side view, showing the parts in the closed position after the material has been passed through.' Fig. 3 30 shows in detached side view and section one of the dies, drawn to a larger scale. Fig. 4 shows the other die in corresponding views. Figs. 5 and 6 are detached views of the two handles and the parts to which they are at-35 tached. Fig. 7 is a side view of the gear which carries one of the dies. Fig. 8 is a perspective view of the press in the closed position; and Fig. 9 shows in perspective view the several parts of the press drawn to an enlarged scale, 40 the handle portions being omitted for want of

space. Hand H' are the two rolling dies, the curved acting faces of which may be suitably engraved and provided at their extremities with serra-45 tions or teeth b and i'. The die H' is carried by a stem, D, forming part of the segmental gear C, which is provided with the handle A', preferably made in one with the gear. The die H is carried by a stem, F, forming part of 50 a segmental gear, E. The dies are secured to the outer ends of the stems by means of pins d d', or other suitable means, and the portions

of the stems F and D between the dies and their gears are adapted to bearings in an arm or frame, B, Fig. 9, which is provided with 55 a suitable handle, A, corresponding with the handle A' of the gear C, Figs. 1, 2, and 8. The bearings a a' are at such a distance apart that the teeth of the segmental gear-wheels C and E mesh into each other, and the acting 60 faces of the dies are closely adjacent to each other, as shown in the drawings, so that when the handle A' is raised or moved away from the handle A, as shown in Fig. 1, the die H', carried by the gear C, will be moved on its 65 axis, and a corresponding motion imparted to the die H through the gears CE. In order, however, to prevent the breakage of the teeth of the gears by careless sudden opening of the levers, I place stops c and e' at the ends of the 70 rows of teeth on the two segments. These stops project some distance beyond the pitchline of the gears. When the dies have been opened, as described, the wires carrying the seal to be pressed can be readily inserted side- 75 wise between the dies, and then by bringing together the handles A' A the dies will be turned on their axes and will grip the soft metal of the seal and impress it by a rolling action.

In presses of this character as heretofore constructed the gears and dies have been arranged side by side, (in fact, each die and its gear were made in one piece,) so that the strain on the dies tended to separate the gears 85 as well as the dies, and a bar or strap had to be employed in front of the dies to unite the journals or axes of the latter. Consequently, the metal of the seal and its wires had to be inserted endwise between the opened dies be- 90 fore the seal could be pressed.

By mounting the dies on one side of the frame and their gears on the other, and by leaving the dies open for the free insertion of the seal at the side, I not only facilitate the 95 manipulation of the tool and simplify its operation, but also strengthen the construction, since the strain on the dies is counteracted by the gears on the other side of the frame or arm B, and is taken up by the bearings between 100 the dies and gears. As the die H is manipulated indirectly while the die H' is moved directly by the lever A', I prefer to make the gear E and die H of a somewhat longer radius

than the radius of the gear C and die H', so as to get a good leverage on the gear E and die H. I also prefer to provide one of the dies with a flange, b', at its outer edge, to enter a corresponding recess, i, in the other die, Figs. 3, 4, 8, and 9, to confine the metal during the pressing operation.

I claim as my invention—

1. The combination of the rolling dies of a seal-press and operating gears with a supporting arm or frame between the dies on one side and the gears on the other, substantially as and for the purpose set forth.

2. A seal-press having rolling dies open at the side for the sidewise insertion of the seal and wires, substantially as described.

3. The combination of the rolling dies, a handled frame or arm, B, and a gear-wheel, E, carrying one of the dies and having a stop, e', with a handled gear-wheel, C, carrying the 20 other die, and having a stop, c, substantially as described.

4. The combination of the rolling dies of a seal-press with operating-gears having stems to which the dies are secured, a handle on one 25 of the gears, and a handled arm or frame having bearings for the stems, substantially as set forth.

CHARLES C. ABBE.

Witnesses:
R. Solano,
Walter Abbe.