

T. L. VON DORN.
Screw-Plates.

No. 145,701.

Patented Dec. 16, 1873.

Fig. 1.

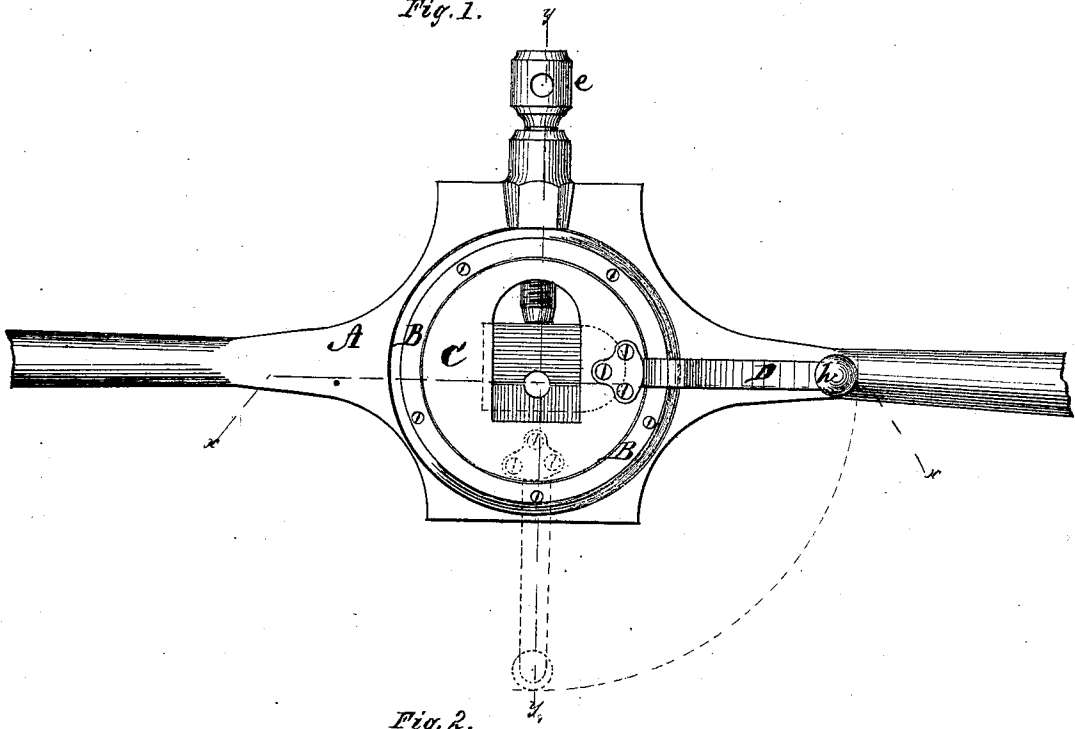


Fig. 2.

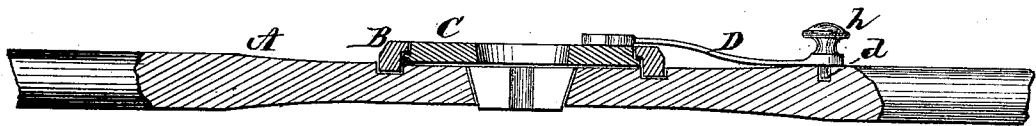


Fig. 3.

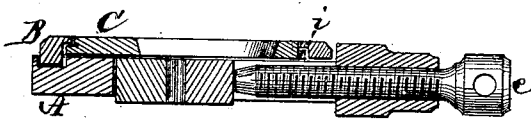
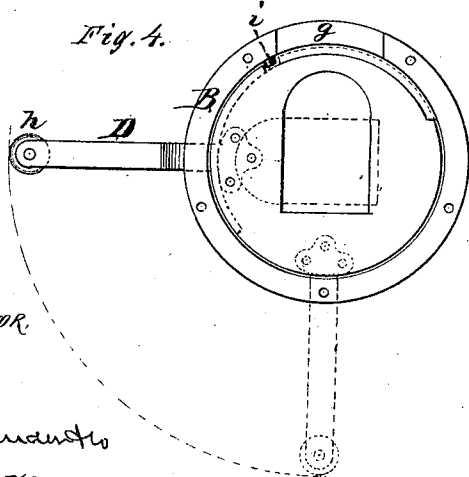


Fig. 4.



WITNESSES:
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UNITED STATES PATENT OFFICE.

THEODORE L. VON DORN, OF OMAHA, NEBRASKA, ASSIGNOR TO HIMSELF
AND ALBERT J. POTTER, OF SAME PLACE.

IMPROVEMENT IN SCREW-PLATES.

Specification forming part of Letters Patent No. **145,701**, dated December 16, 1873; application filed
November 22, 1873.

To all whom it may concern:

Be it known that I, THEODORE L. VON DORN, of Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Screw-Plates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, in which—

Figure 1 is a plan view; Fig. 2, a longitudinal vertical section through the line *x x*; Fig. 3, a section through the line *y y*, and Fig. 4 a reverse view of the circular plate.

The object of my invention is to furnish an effective and expeditious method of securing dies of various sizes in one and the same screw-plate; and the nature of it consists in the combination and arrangement of devices hereinafter set forth and claimed.

In order that others may avail themselves of the benefits of my invention, I will now describe its construction and operation.

A represents the stock or screw-plate, furnished with the usual screw, *e*, and also with the usual receptacle for the dies. This receptacle, however, differs from that in the ordinary screw, from the fact of having its sides sloped inwardly from the top. The dies are constructed with their ends beveled or sloped, so as to fit snugly, yet easily, the sides of the receptacle.

It will thus be observed that the dies can only be inserted or removed from the top side of the screw-plate.

B represents a ring, which fits in a circular cavity in the plate A, as seen in Fig. 2, and is secured thereto by means of screws. This ring is turned out on its inner circumference, so as to leave a slight projecting flange around its upper portion, and is cut away, as shown at *g*, Fig. 4, so as not to interfere with the screw *e*. *i* is a stop or projection on the inner circumference of ring B, located just to the right of the recess *g*, Fig. 4, the object of which will be more fully seen hereafter. C represents a circular plate with an opening of sufficient size to allow of the dies being re-

moved or inserted when it is turned at right angles to the opening in the screw-plate. It should be, however, of less width than the length of the dies. Around three-fourths of the circumference of plate C, on its lower half, is turned a flange, leaving a plain surface on one-fourth of its periphery. (See Fig. 4.) D represents a spring-handle attached securely to plate C, in such a position that, when it is turned one-fourth of the distance of the circumference of said plate, the length of its recess will be parallel with that of the dies, and they may be removed or inserted; but when the handle D is parallel with the handles of the screw-plate, the dies are securely fastened in their proper places. *h* is a knob on the end of handle D, and extends through it, so as to form the catch *d*, which enters a hole in the handle of screw-plate, Fig. 2, and locks the plate C securely over the dies.

It will have been seen that the object of the ring B is to bind or retain in place the plate C by means of the flanges, which have been fully described, and which are shown in Figs. 2 and 3.

The advantages of my invention are apparent, as, with one screw-plate, dies of various sizes may be used, both easily and expeditiously, thus much reducing the expense in the use of this necessary implement.

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

1. The combination of screw-plate A, ring B, and rotating plate C, substantially as and for the purpose described.

2. The rotating plate C, provided with spring-handle D, in combination with ring B, with stop *i*, all arranged in connection with a screw-plate, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own, I affix my signature in presence of two witnesses.

THEODORE L. VON DORN.

Witnesses:

BYRON REED,
JOHN EVANS.