

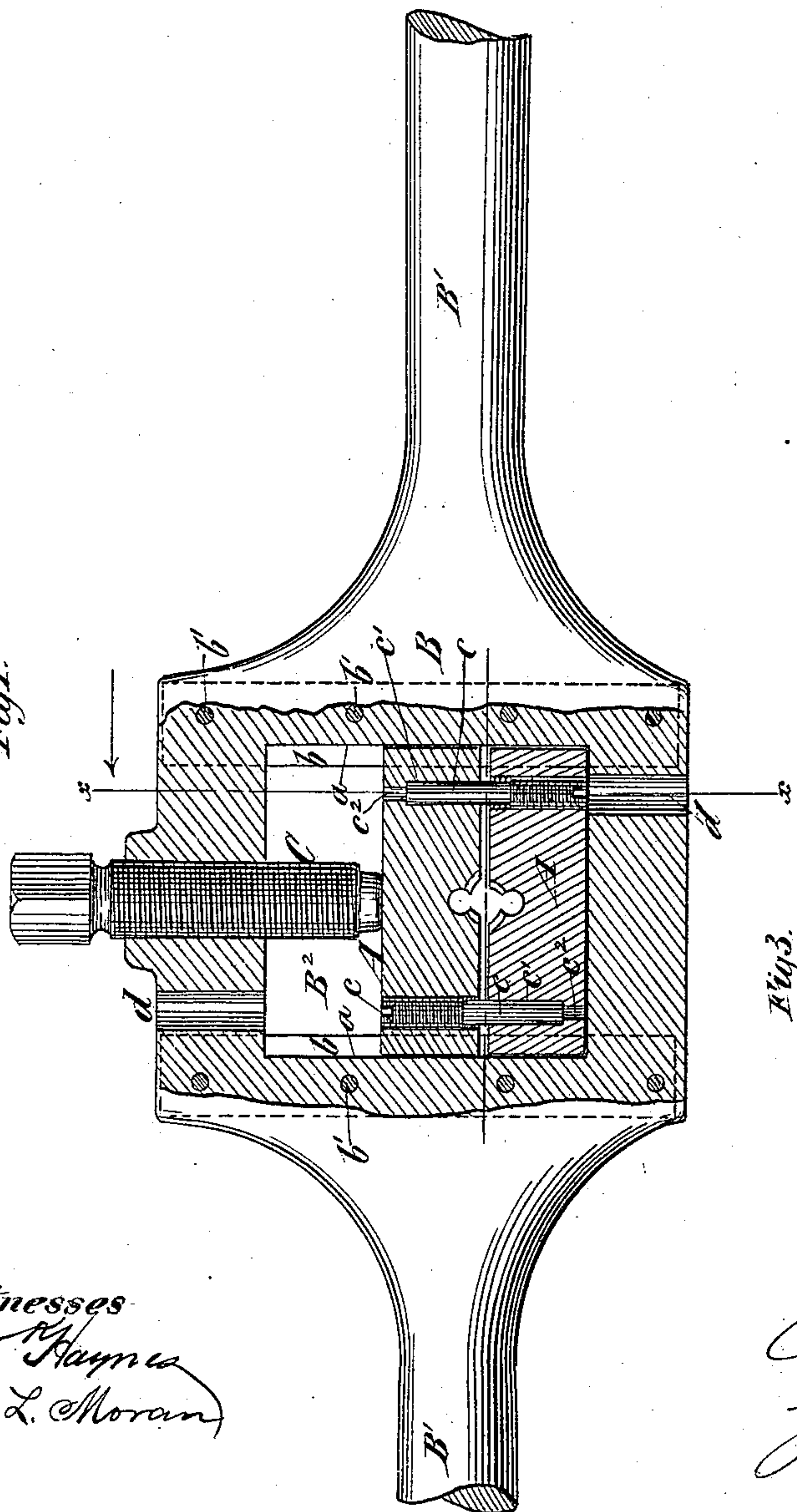
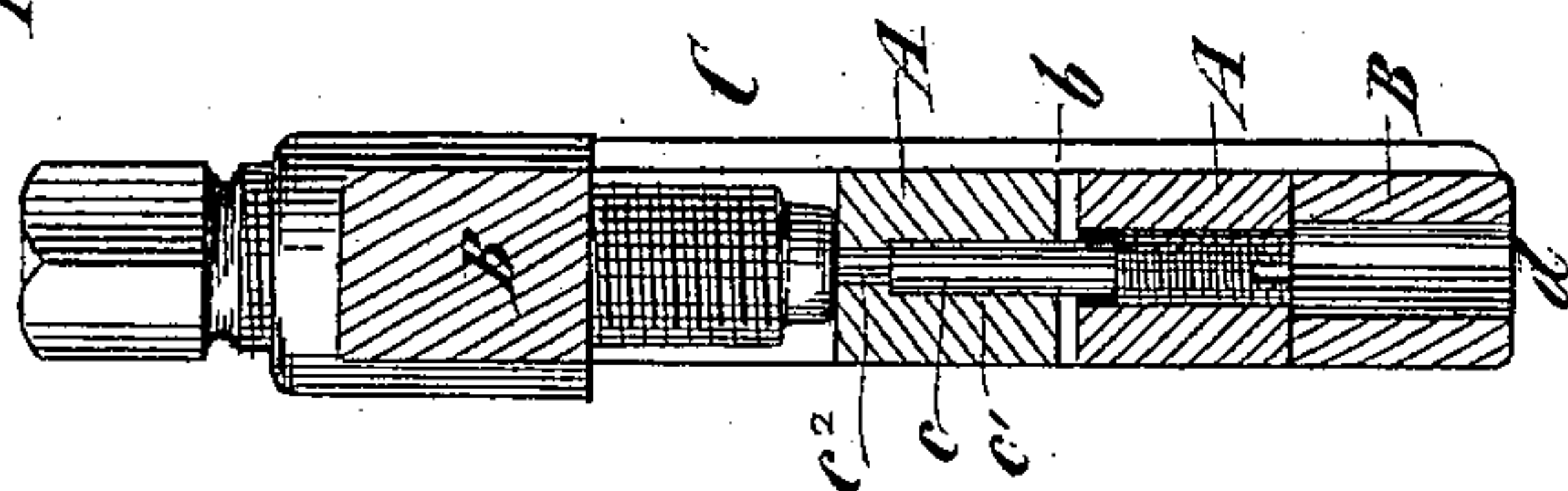
(No Model.)

C. ELTERICH.

DIE AND DIE STOCK.

No. 291,884.

Patented Jan. 15, 1884.



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UNITED STATES PATENT OFFICE.

CHARLES ELTERICH, OF NEW YORK, N. Y.

DIE AND DIE-STOCK.

SPECIFICATION forming part of Letters Patent No. 291,884, dated January 15, 1884.

Application filed March 2, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES ELTERICH, of the city and county of New York, in the State of New York, have invented a new and useful Improvement in Screw-Threading Dies and in Stocks Therefor, of which the following is a specification.

My invention relates to screw-threading dies, which are composed of two sections, and to stocks in which such dies are held, and by which they are operated. An important object of my invention is to hold the two sections of such dies in proper relation to each other, irrespective of the stocks, whereby I enable more accurate work to be done, and whereby the dies may be more readily placed in and removed from the stocks.

The invention consists in a screw-threading die composed of two sections provided with guide-pins and holes or recesses receiving said pins, whereby the sections are held in proper relation to each other, each pin being secured in one section and adapted to slide freely into a hole in the other section, and thereby affording provision for the ready separation of the sections when desired.

The invention also consists in a screw-threading die composed of two sections provided with guide pins and holes, each pin consisting of a screw screwed into one section and having beyond its thread a smooth portion fitting in and adapted to slide into a guide-hole in the other section, whereby the pins serve not only as guides for holding the sections in proper relation, but also as adjustable stops for limiting their movement toward each other.

The invention also consists in the combination, with a die composed of two sections provided with screw-threaded guide-pins and recesses or holes receiving said pins, as above described, of a stock for said die provided with holes opposite said screw-threaded guide-pins, through which a screw-driver may be inserted for adjusting the guide-pins, all as more fully hereinafter described.

In the accompanying drawings, Figure 1 is a sectional view of a stock and die embodying my invention. Fig. 2 is a section thereof on the dotted line *x x*, Fig. 1; and Fig. 3 is a view of one of the die-sections.

Similar letters of reference designate corresponding parts in the several figures.

A A designate the two die-sections, and B designates the body of the stock wherein they are fitted. B' designates the handle portions of the stock. The die-sections A are fitted in an opening, B², in the stock; but this opening has its opposite walls formed by plane surfaces *a*, and the die-sections have square plane ends, as is shown in Fig. 3. In order to secure or hold the die-sections in the stock, the latter has flanges or strips *b*, secured to it by screws *b'*, and it may have such flanges or strips on both sides or on one side only, as here shown. The die-sections are held together by a screw, C, in the usual way. The die-sections A are provided with guide-pins *c* and holes or recesses *c'* for receiving them, whereby the two sections are held in proper relation to each other, irrespective of the stock B. As here represented, each section has a guide-pin, *c*, secured in it and a recess or hole, *c'*, for receiving the guide-pin of the other section. The holes *c'* are not extended clear through the sections, but are of such depth that the ends of the pins may bear against their bottoms, and thereby form stops for limiting the movement of the sections toward each other, and the said holes *c'*, therefore, form recesses. At the bottoms of said recesses there are smaller holes *c²*, which are made in forming the recesses, and which provide for the escape of dirt. Instead of bearing on the bottoms of the recesses *c'*, the pins *c* may have shoulders, which bear against the face of the section into which they enter, and so form stops.

The guide-pins *c* are here shown as secured by screw-threads in the sections, and opposite said pins are holes *d* in the stock, through which a screw-driver may be inserted while the die is in place for adjusting the said pins.

By adjusting the guide-pins *c* the size of the thread which may be cut with the die may be varied; but the pins may be non-adjustable and other means employed for this purpose—as, for example, washers placed on the guide-pins between the die-sections.

One great advantage resulting from my invention is that after cutting one thread the die

may be opened and lifted off instead of being turned back, and when the screw C is again set up and the sections A are brought as near together as the pins *c* will allow, another thread
5 may be cut of exactly the same size. In this way I provide for cutting any number of threads of a standard size.

Although the die here shown is rectangular in form, my invention is applicable to dies
10 round or of any other form, and the stock or holder may be of any suitable construction to receive and hold such dies.

I do not claim, broadly, a screw-threading die composed of two sections and screws for
15 holding them at a required distance apart or screws for drawing them together; but I do desire to cover, broadly, two die-sections provided with guide-pins and holes, each pin being secured, adjustably or rigidly, in one section
20 and adapted to slide freely into a hole in the other section. By this means the die-sections are guided relatively to each other and kept in line irrespective of the stock or any other parts, and yet they may be separated by a
25 simple movement away from each other with the same facility that they could be separated if laid side by side, but entirely unconnected. A direct movement of one away from the other will withdraw the guide-pins from their holes.

30 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A screw-threading die, consisting of two sections provided with guide-pins and with
35 holes or recesses for receiving said pins and holding the sections in proper relation to each other, each pin being secured in one section and adapted to slide freely into a hole in the other section, and thereby affording provision

for the ready separation of the sections when desired, substantially as described. 40

2. A screw-threading-die, consisting of two sections provided with guide-pins and with holes for receiving said pins, serving both to hold the sections in proper relation to each other, and also as stops to limit the closing
45 movement of said sections, each pin being secured in one section and adapted to slide freely into a hole in the other section, and thereby affording provision for the ready separation of the sections when desired, substantially as
50 herein described.

3. A screw-threading die, consisting of sections provided with guide pins and holes, each pin consisting of a screw screwed into one section and having beyond its thread a smooth
55 portion adapted to slide freely into a guide-hole in the other section, said guide-pins serving both to hold the sections in proper relation to each other and to form stops for adjustably limiting the movement of said sections toward each other, substantially as described. 60

4. The combination of the die-sections A A, provided with screw-threaded guide-pins *c*, each having a smooth portion beyond the
65 thread, and with holes or recesses *c'*, in which said smooth portions are free to slide, and the stock B, provided with holes *d* opposite the said guide-pins and through which a screw-driver may be inserted to turn said pins without removing the die from the stock, substantially as described. 70

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Witnesses:

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