

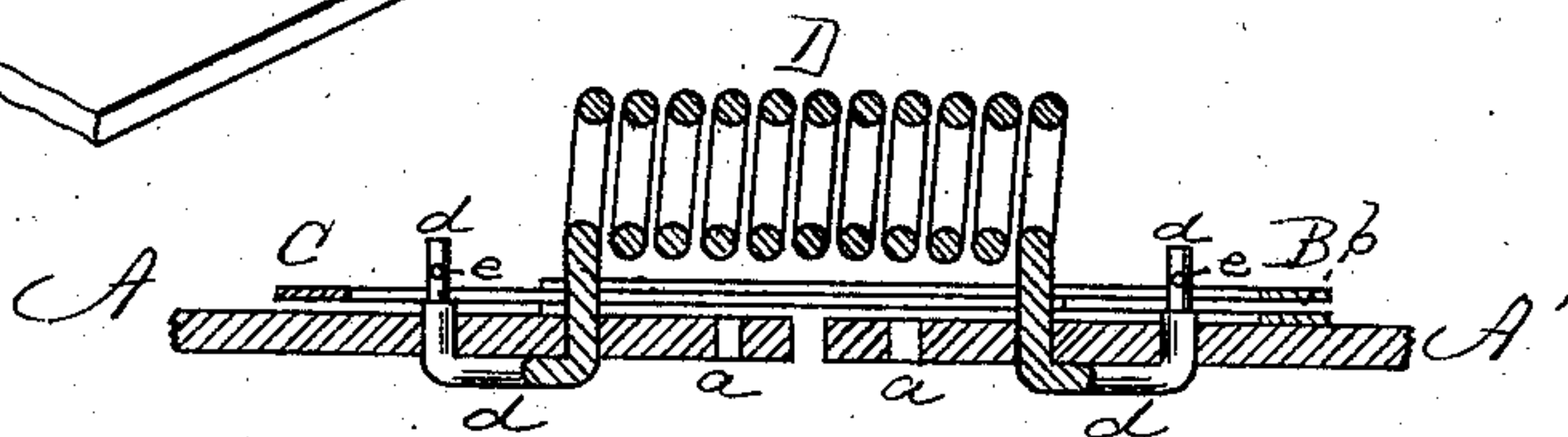
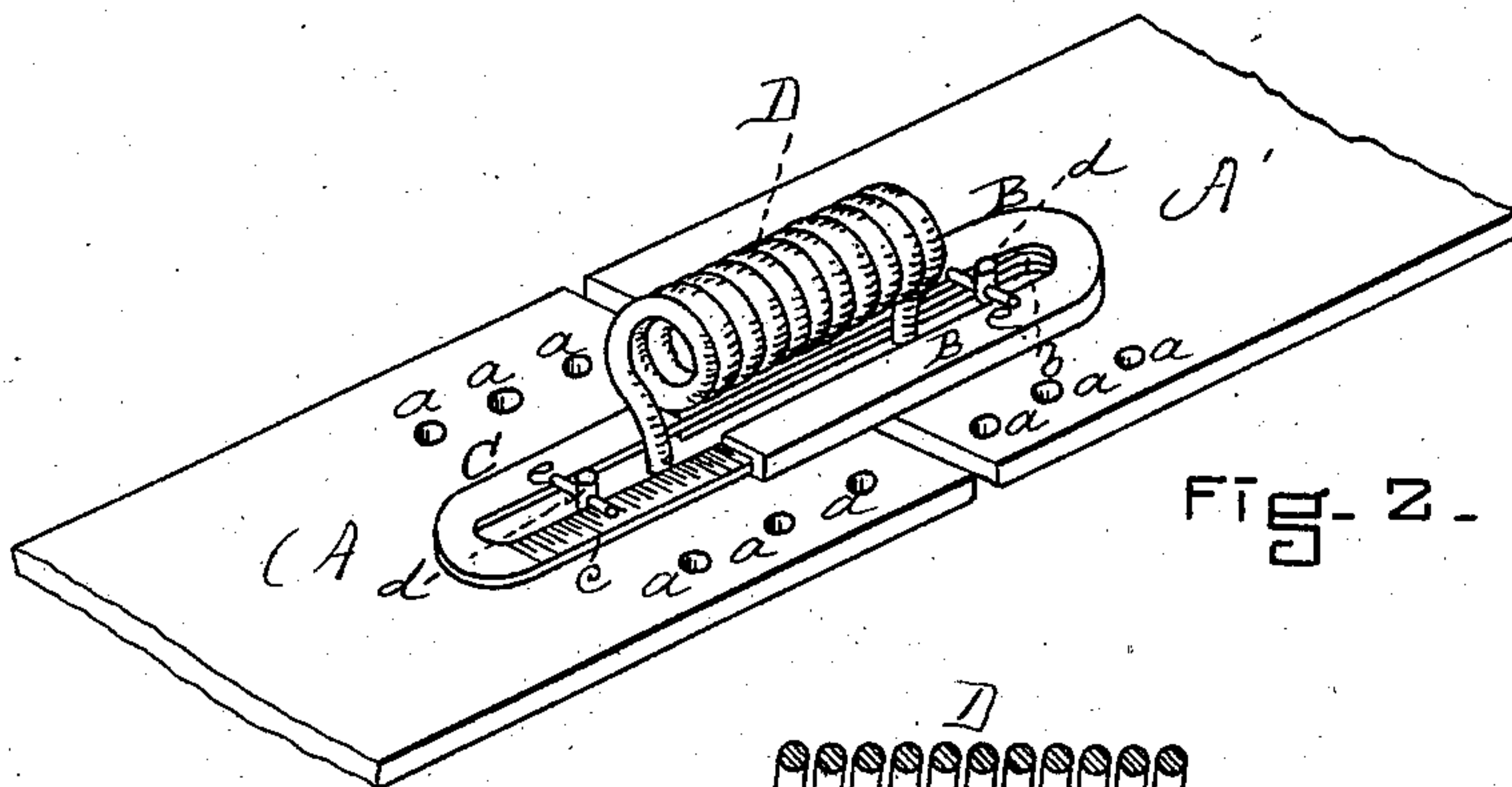
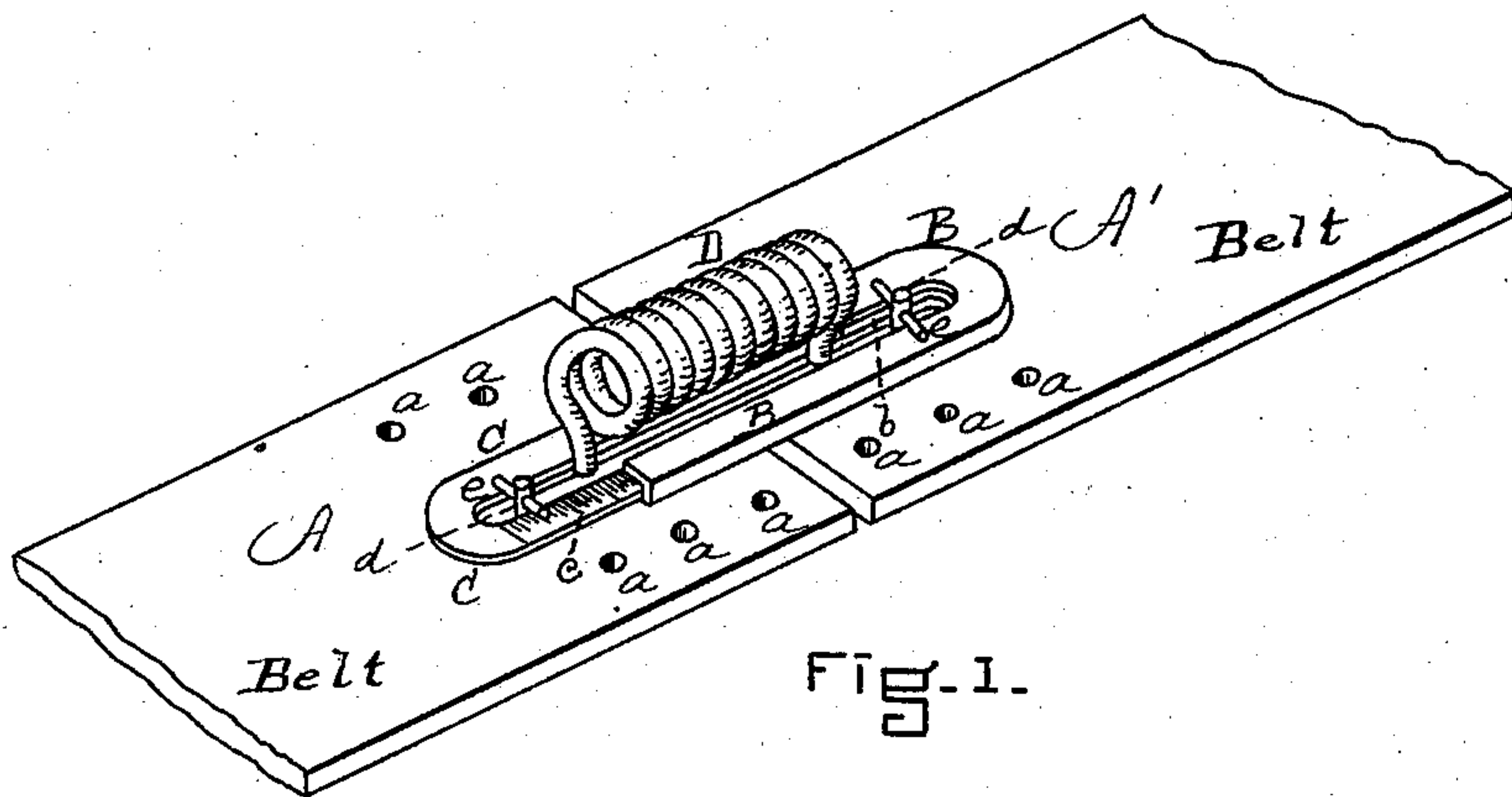
(No Model.)

J. McCLOSKEY.

DYNAMOMETER.

No. 287,841.

Patented Nov. 6, 1883.



WITNESSES

Joseph Ashbaugh.  
B. M. Williams

INVENTOR

John Mc. Closkey.

By his Atty.

Henry W. Williams

# UNITED STATES PATENT OFFICE.

JOHN McCLOSKEY, OF BOSTON, MASSACHUSETTS.

## DYNAMOMETER.

SPECIFICATION forming part of Letters Patent No. 287,841, dated November 6, 1883.

Application filed August 27, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN McCLOSKEY, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful  
5 Improvements in Dynamometers, of which the following is a specification.

This dynamometer is especially constructed for application to belts of pulleys.

In the accompanying drawings, in which  
10 similar letters of reference indicate like parts, Figures 1 and 2 represent my improved dynamometer applied to the outer side of a belt, and Fig. 3 represents a longitudinal sectional view of the same.

15 A and A' are the ends of a belt, and *a a* are the lacing-holes.

B is a horseshoe-shaped piece of metal provided throughout its length with the groove *b*, into which is slid the plate C, of similar  
20 shape, and provided with a scale, *c*, say of from one to sixty on a single inch of its length, said scale representing pounds.

D is a spring whose ends *d* are bent, as shown, so as to pass through the belt, and  
25 back again, by means of the lacing-holes *a*. The spring D *d* is placed in the lacing-holes, (from which the lacing has been removed,) as shown, and the horseshoe-plates B C applied and pushed inward until the portions *d* of the  
30 spring touch the outer ends of their slots. The pulley is then started and stopped, and the point on the scale *c*, next the plate B, noted, the spring having drawn the plates B C apart to that extent, the fit of said plates being such  
35 as to produce friction enough to hold them in

the extreme position—say that shown in Fig. 1. The work is then applied to the pulley, and it is started again and stopped, the result being that the plates B C are drawn still further apart—say as shown in Fig. 2. By subtracting the number of pounds indicated in Fig. 1 from the number indicated in Fig. 2 the amount of power necessary to do the work is ascertained. The speed of the belt will give the distance the power is transmitted. 4  
A dynamometer is applied, or, at least, a spring, for each inch in width of the belt. A pin, *e*, or other suitable device is applied to each end *d* of the spring, to prevent its separation from the plates B C, care being had to allow sufficient space, so that the movement of said  
5 pins, as the spring contracts with the stoppage of the belt, will not effect the plates B C.

The device is placed on the outside of the belt, so as not to strike the pulley. 5

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

The herein-described improved dynamometer, consisting of the spring D, provided with the bent ends *d*, the grooved plate B, and sliding plate C, provided with a suitable scale, said plates being provided with openings for the ends *d* of the spring, substantially as and for the purpose set forth.

JOHN McCLOSKEY.

Witnesses:

HENRY W. WILLIAMS,  
JOSEPH ISHBAUGH.