

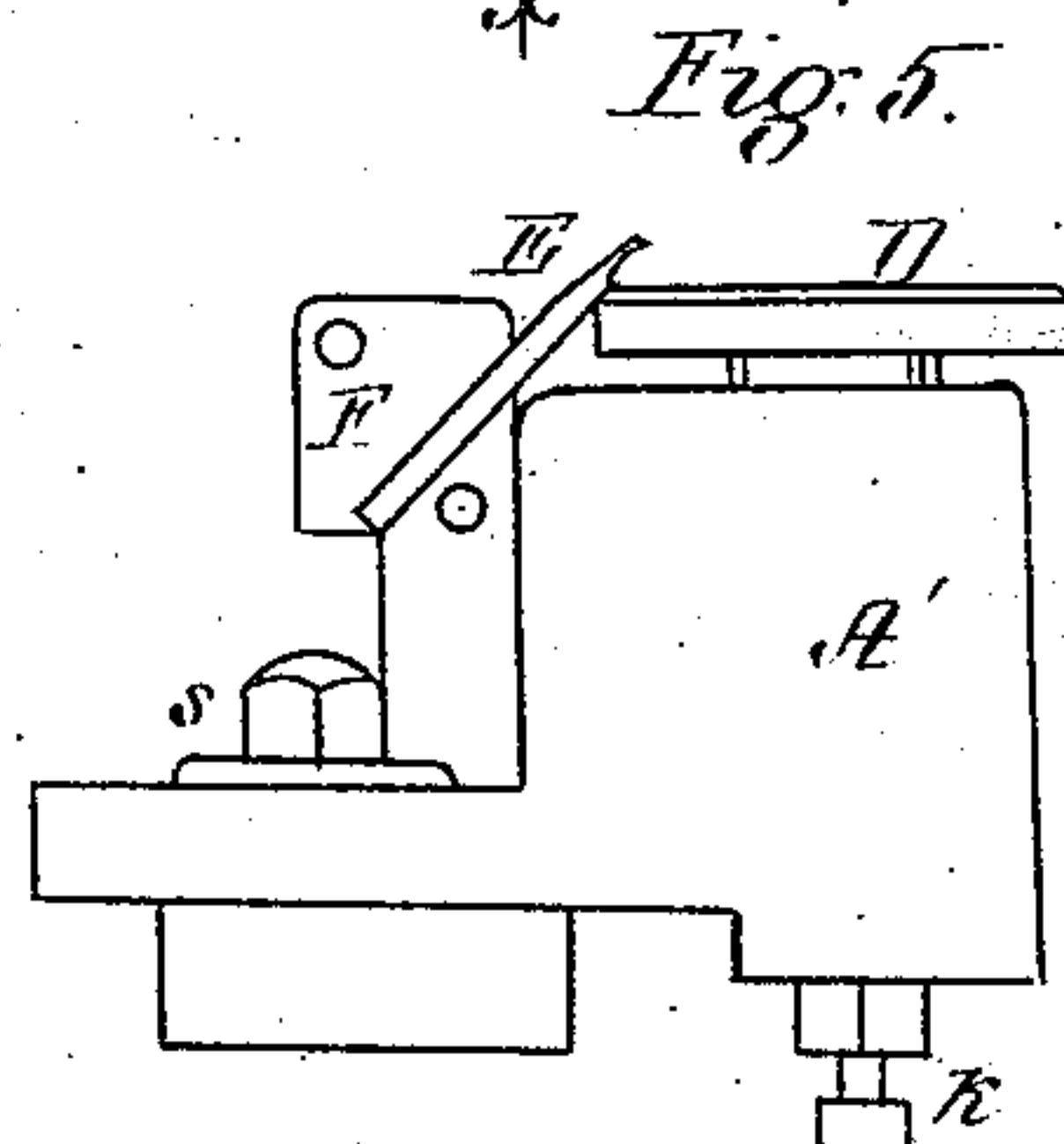
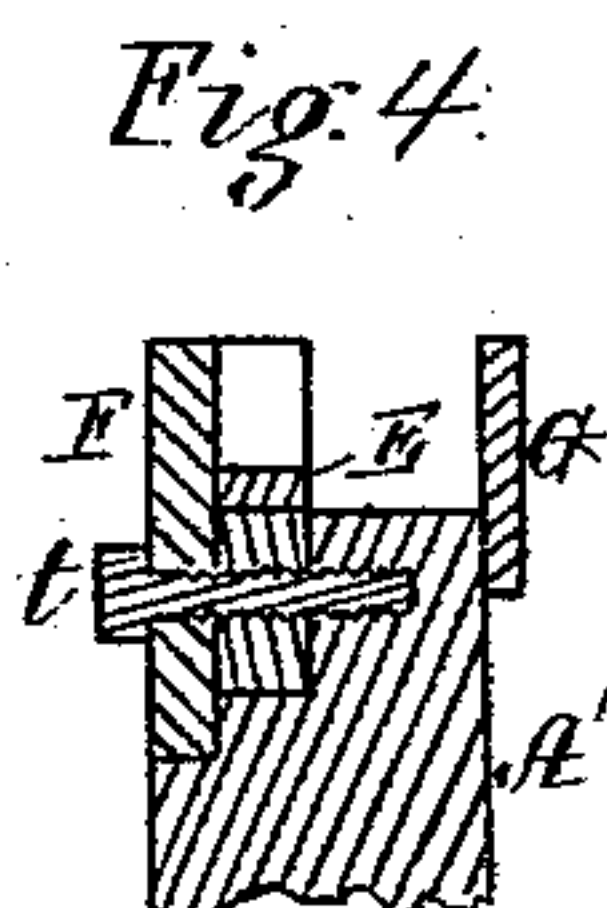
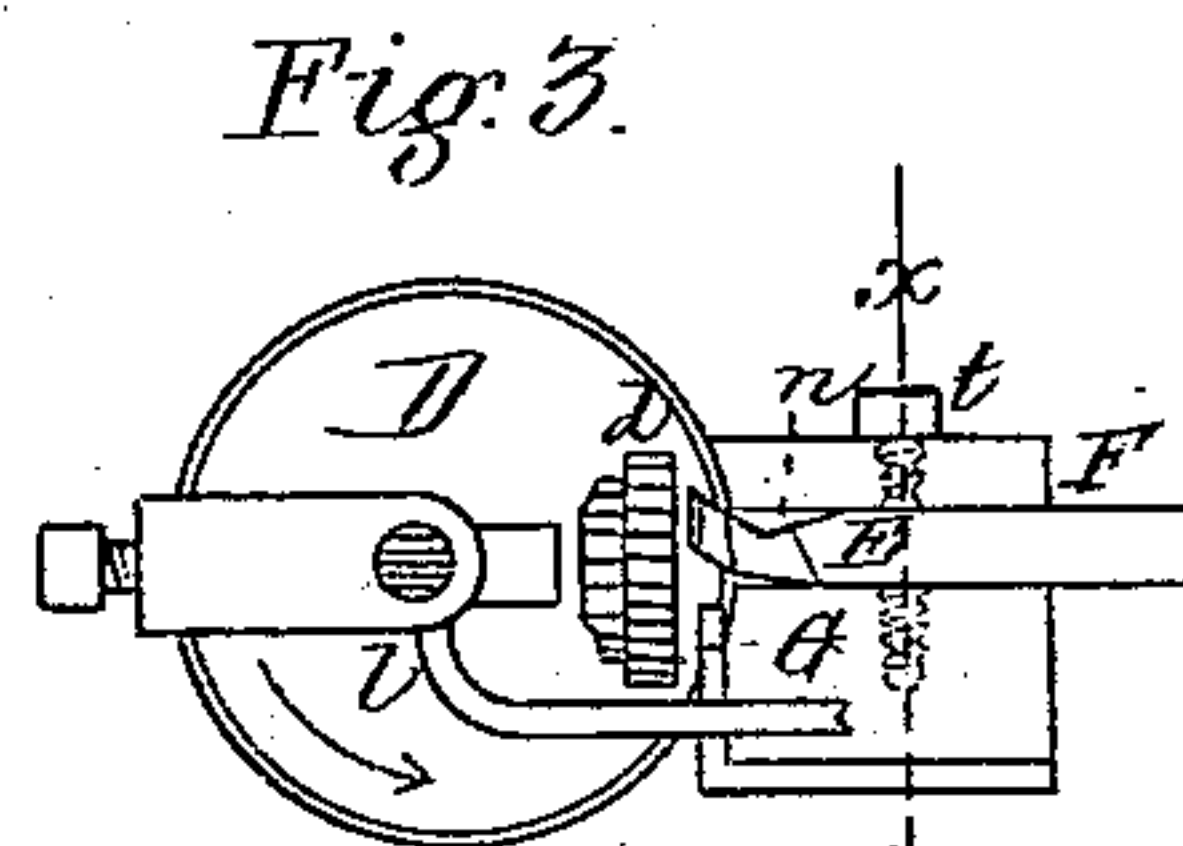
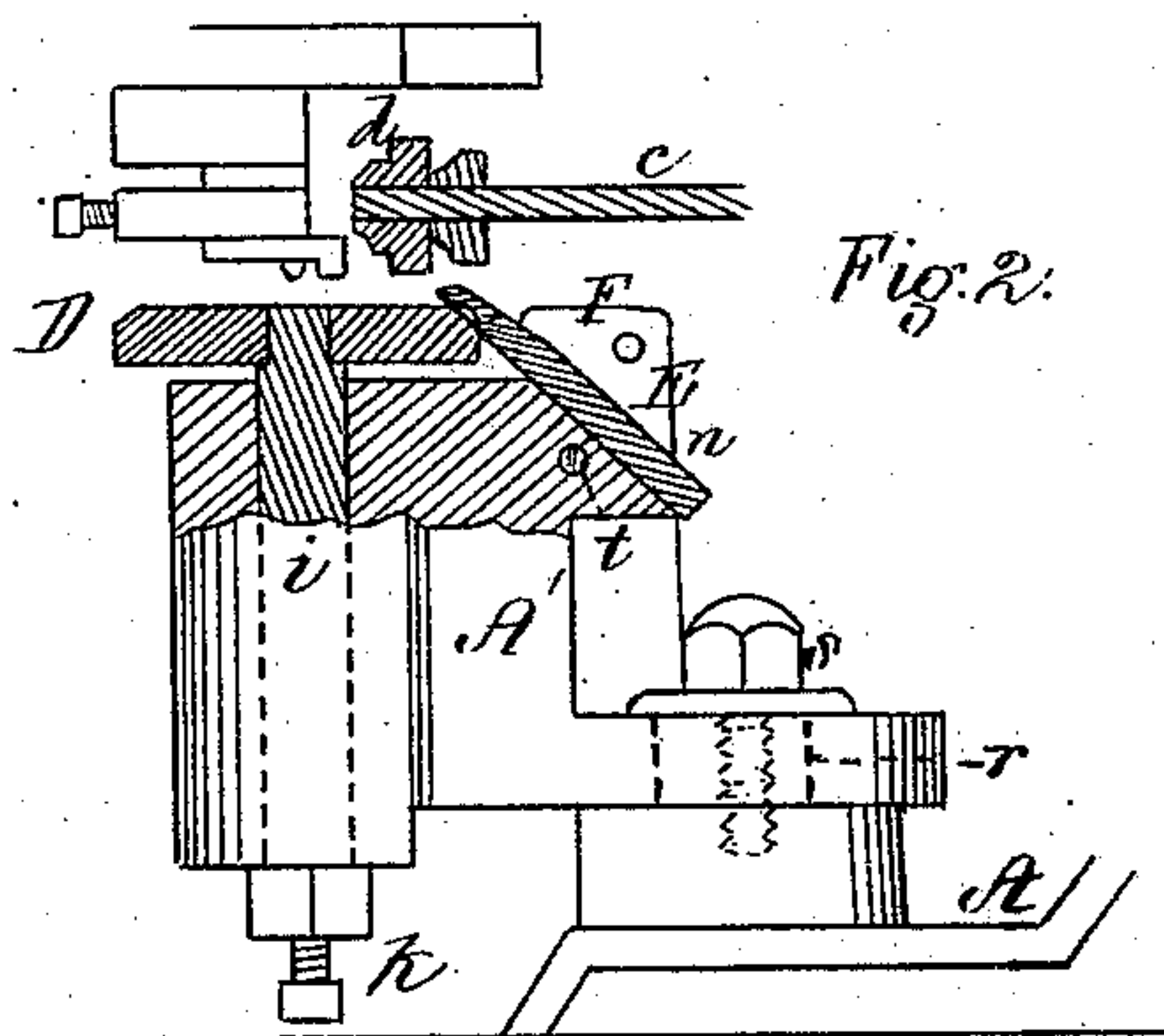
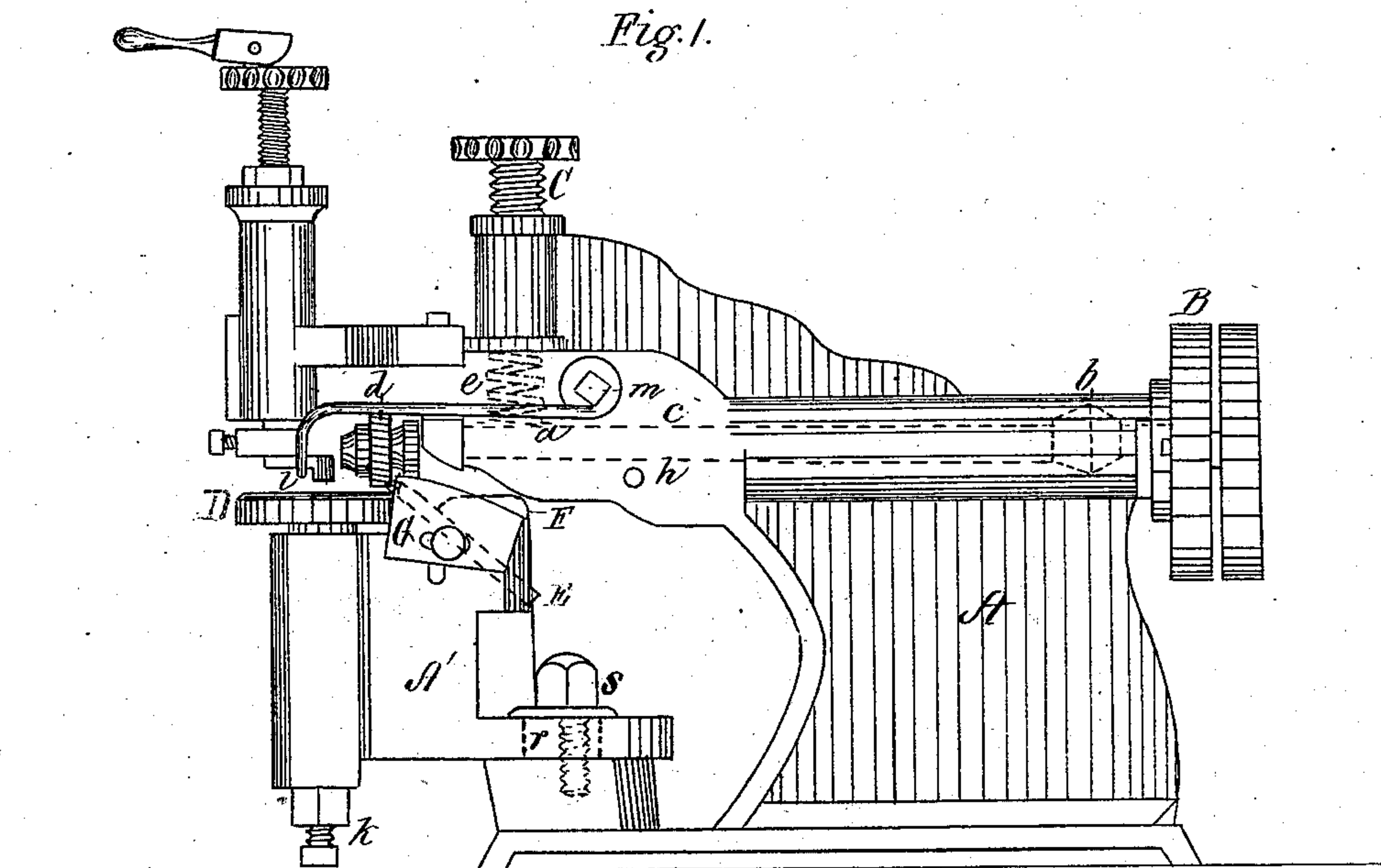
(No Model.)

W. S. FITZGERALD.

SKIVING MACHINE.

No. 287,813.

Patented Nov. 6, 1883.



Witnesses,
E. J. Stearns
W. W. Stearns

Inventor,
Walter S. Fitzgerald,
per W. W. Stearns,
Attorney

UNITED STATES PATENT OFFICE.

WALTER S. FITZGERALD, OF BOSTON, MASSACHUSETTS.

SKIVING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 287,813, dated November 6, 1883.

Application filed July 25, 1883. (No model.)

To all whom it may concern:

Be it known that I, WALTER S. FITZGERALD, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Skiving-Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is an elevation of the front side of a skiving-machine having my improvement applied thereto. Fig. 2 is a sectional elevation of a portion of the same. Fig. 3 is a sectional plan. Fig. 4 is a section on the line $x x$ of Fig. 3. Fig. 5 is an elevation of a portion of the rear side of the machine.

My present invention has special reference to the relative location and position which the cutting-knife bears to the rotating table upon which the stock to be cut is fed; and this invention consists in placing the skiving-knife at the right of the rotating table and slightly to the rear of the vertical plane passing through the axis of the feed-roll, by which arrangement of the knife the leather, leather-board, &c., is cut evenly and uniformly, as required, while the tendency of the creasing or wrinkling of the material is entirely overcome.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In the said drawings, A represents the frame, in suitable bearings, $a b$, in which revolves the horizontal driving-shaft c , carrying a driving-wheel, B, at one end and a serrated or toothed feed-roll, d , at its other end. This feed-roll is capable of vertical adjustment by operating a screw, C, which acts upon a spiral spring, e , interposed between its bottom and the bearing a of the driving-shaft thereunder, said shaft being free to rock on its bearing b , and its downward movement being limited by a stop, h .

D is a circular table secured to the top of a vertical shaft, i , having its bearings in a block, A', capable of being laterally adjusted, and secured on the frame A by means of a slot, r , and clamping-screw s , the vertical adjustment

of the table being effected by operating the screw k at the bottom of the shaft i , the material to be skived being fed upon the table, which is caused to revolve by the friction of the same thereon while being guided forward by the feed-roll.

l is a spring presser-rod pivoted at m to the frame, the lower end of the rod being brought to bear on the material when convex or outwardly-curved surfaces are being cut, and as this rod has but a slight bearing on the stock, the facility of turning the same at sharp angles while being fed is thereby increased.

Within a recess, termed a "throat," n , formed in the adjustable block A', is located a skiving-knife, E, the bottom of the throat being inclined and situated to the right of the table, and slightly to the rear of a vertical plane passing through the axis of the feed-roll d , the top of the inclined throat extending nearly to the under side of said table. The knife suitable for the particular description of stock to be cut is held in the proper position and at the required inclination by clamping a plate, F, against the side of the shank or knife stock by tightening the screw t , an upward angle, Fig. 2, of about thirty-five degrees with the horizontal plane being preferred when the material to be cut is thin, and having a direction downward toward the table when thick material is to be cut. G is an adjustable gage, against which the edge of the material bears as it is carried by the feed-roll to the knife. This gage is set more or less over the table, according to the amount of the edge to be removed. The adjustable block A' is moved, with the knife, table, and gage, horizontally in either direction to suit the required bevel to be given the edge of the stock. For instance, when the edge of a thin piece of material is to be acted on, I move the adjustable block to the right, thus bringing the right-hand portion of the periphery of the table nearer the driving-wheel B, after which I adjust the knife to its exact relative position with respect to the table, and secure it by the clamping-plate F, and, finally, I adjust the edge-gage G. For thick

stock I move the block A' in the opposite direction, then adjust the knife and edge-gage independently of each other.

5 The several portions of the machine, with the exception of the knife-throat *n* and the location of the knife, being well known, they are not particularly described herein.

I claim—

In combination with the rotating table D,

feed-roll *d*, and a gage, the adjustable block to A', with its throat *n* and knife E, located therein, as described, for the purpose set forth.

Witness my hand this 13th day of July, 1883.

WALTER S. FITZGERALD.

In presence of—

N. W. STEARNS,

JAS. W. CHAPMAN.