

(No Model.)

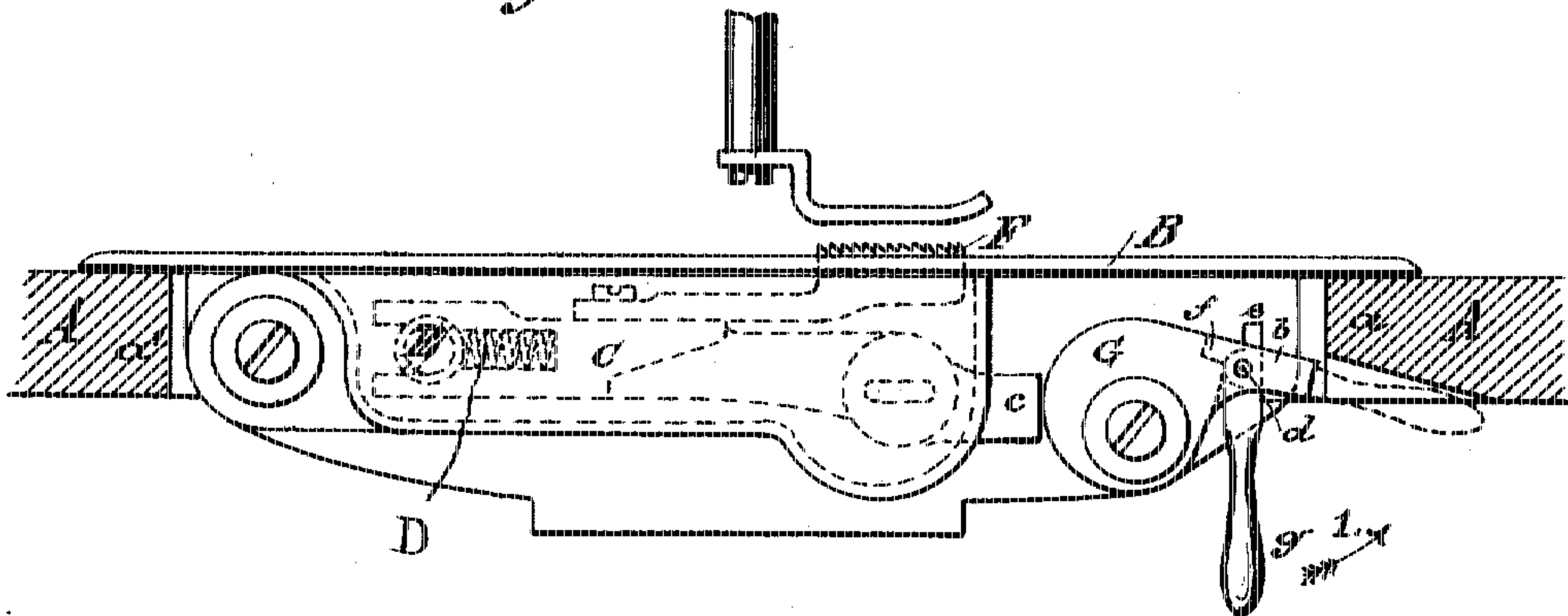
J. H. WHITNEY.

FEED ADJUSTING DEVICE FOR SEWING MACHINES.

No. 373,164.

Patented Nov. 15, 1887.

*Fig. 1.*



*Fig. 2.*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

JAMES H. WHITNEY, OF BROOKLYN, NEW YORK, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE WHITNEY ELASTIC MOTION SEWING MACHINE COMPANY OF NEW YORK.

## FEED-ADJUSTING DEVICE FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 373,164, dated November 15, 1887.

Application filed July 6, 1883. Renewed February 23, 1887. Serial No. 228,594. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. WHITNEY, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Feed-Adjusting Cams for Sewing-Machines, of which the following is a specification.

My invention relates to sewing-machines in which the bed-plate, or that through which the serrated feed-plate projects, is placed flat down directly upon or flush with the top of the sewing-machine stand and the machine proper is supported and pivoted in an opening in the said top of the sewing-machine stand or table. With such construction the handle of the ordinary cam for adjusting the length of the stitch projects laterally beyond the opening in the table, and consequently the machine cannot be raised through the opening without the said handle being turned by contact with the under side of the table-top at the edge of the said opening, thus disturbing the adjustment of the stitch. To make a slot or opening through the table-top for the passage of the handle of the said adjusting-cam disfigures the appearance of the stand, besides making needles, pins, or other minor articles liable to drop through the said opening.

The object of my invention is to overcome these difficulties and provide a construction which will allow of raising and lowering the machine without disturbing the adjustment of the feed; and it consists in an adjusting-cam and handle made in two parts, the handle being pivoted to the cam and constructed as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a cross-section of a portion of the top of a sewing-machine stand and portions of the sewing-machine of the Willcox & Gibbs pattern placed upon it, the bed-plate being laid flat down upon the table and the feed-adjusting cam being constructed according to my present invention. Fig. 2 is a top view of the cam and of a portion of the end of the feed-bar.

A is the top or table, and *a a'* the inner edges thereof adjacent to the opening in which the machine is placed.

B is the bed-plate.

C is the ordinary feed-bar, slotted at one end, and pivoted by the slot upon a stud, E, a spring, D, tending to push the bar always away from the said stud E and with its forward end, *c*, against the feed-adjusting cam.

F is the ordinary serrated feed-plate, secured to the feed-bar C.

The manner in which the feed is effected is old and needs no further description.

The length of the stroke of the feed-plate F is determined, as usual, by the position of the feed-adjusting cam, against which the end *c* of the feed-bar C is stopped from moving in a direction farther away from the stud E.

G is the feed-adjusting cam, the cam portion proper of which is constructed in the usual manner, but which has a handle, *g*, pivoted to the said portion at *d*. The portion *b*, solid with the cam G, is left as long as it can be made without striking the edge *a* of the table in raising the machine, and thus in itself serves as a handle to turn the cam G, although its leverage, when raising the cam and compressing the spring D, is rather small; but for this purpose the handle *g* allows of increased and sufficient leverage. The inner end, *e*, of the handle G lodges, when the handle is raised in the dotted position shown in Fig. 1, into a notch, or against a shoulder, *f*, in the cam, thus making the handle substantially rigid with the cam G when turning it in the direction of the arrow 1.

When the handle is not grasped by the operator, it hangs by its own weight in the vertical position shown in Fig. 1, and is thus entirely out of the way of the edge *a* of the table when raising and lowering the machine.

The turning of the cam in the direction opposite to that indicated by arrow 1 necessitates, of course, less power, as that movement acts with the expansion of the spring D, instead of against the same, and is easily effected by simply a downward pull on the depending handle *g*.