

(No Model.)

G. A. BRADY.

TENSION FOR SEWING MACHINES.

No. 277,449.

Patented May 15, 1883.

Fig. 1.

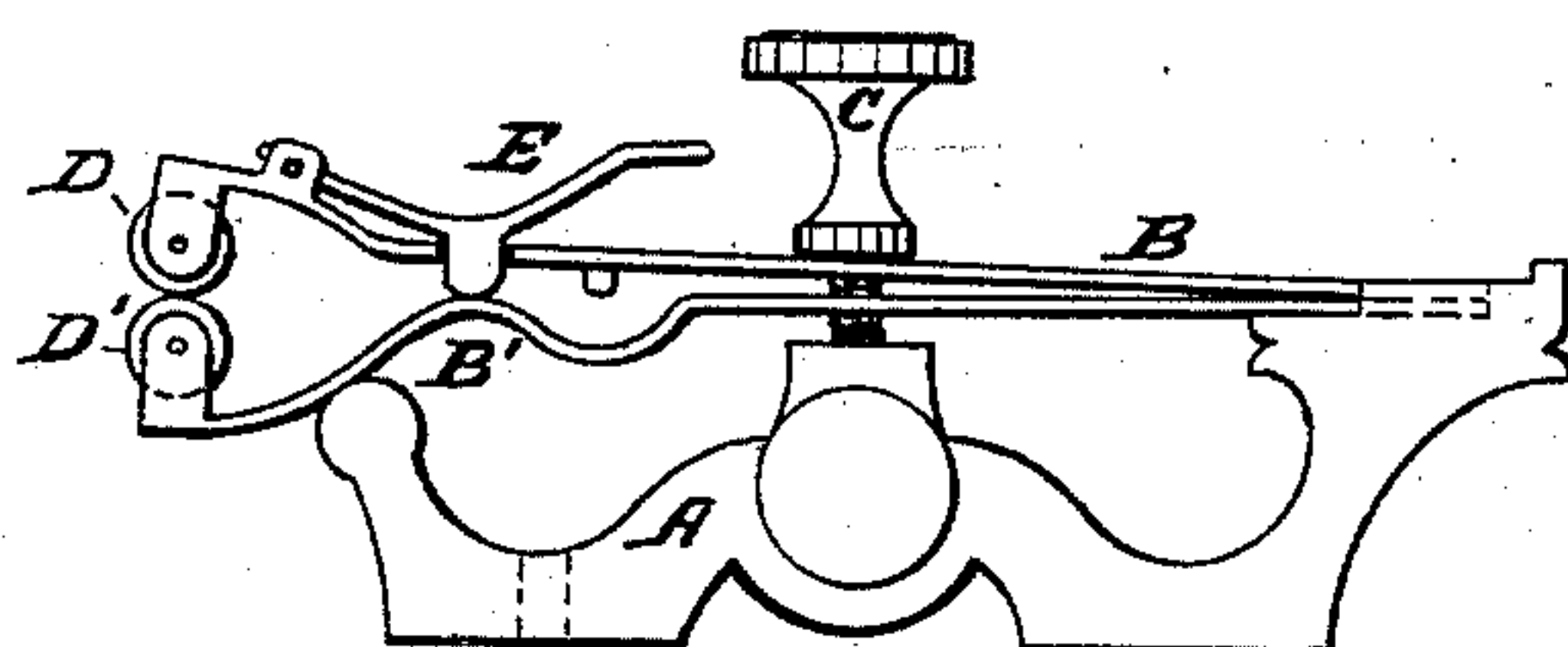


Fig. 2.

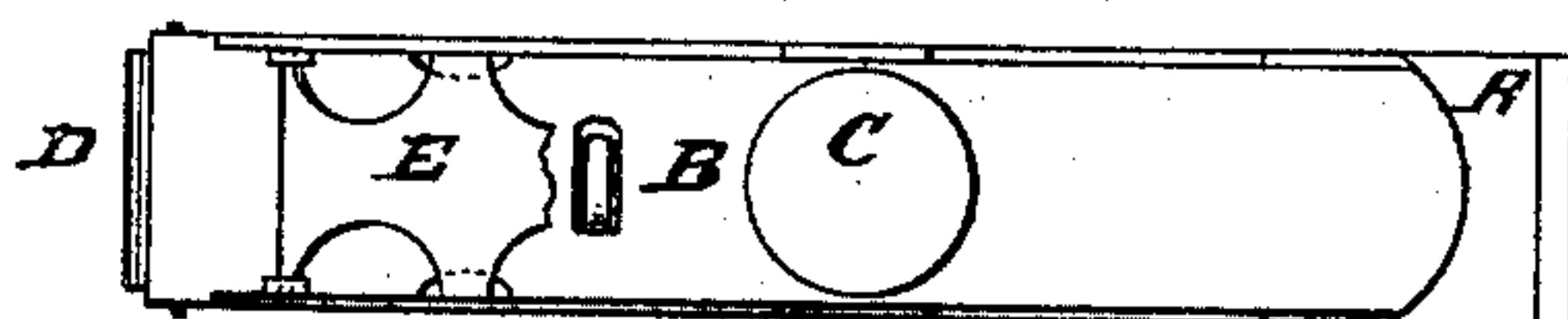
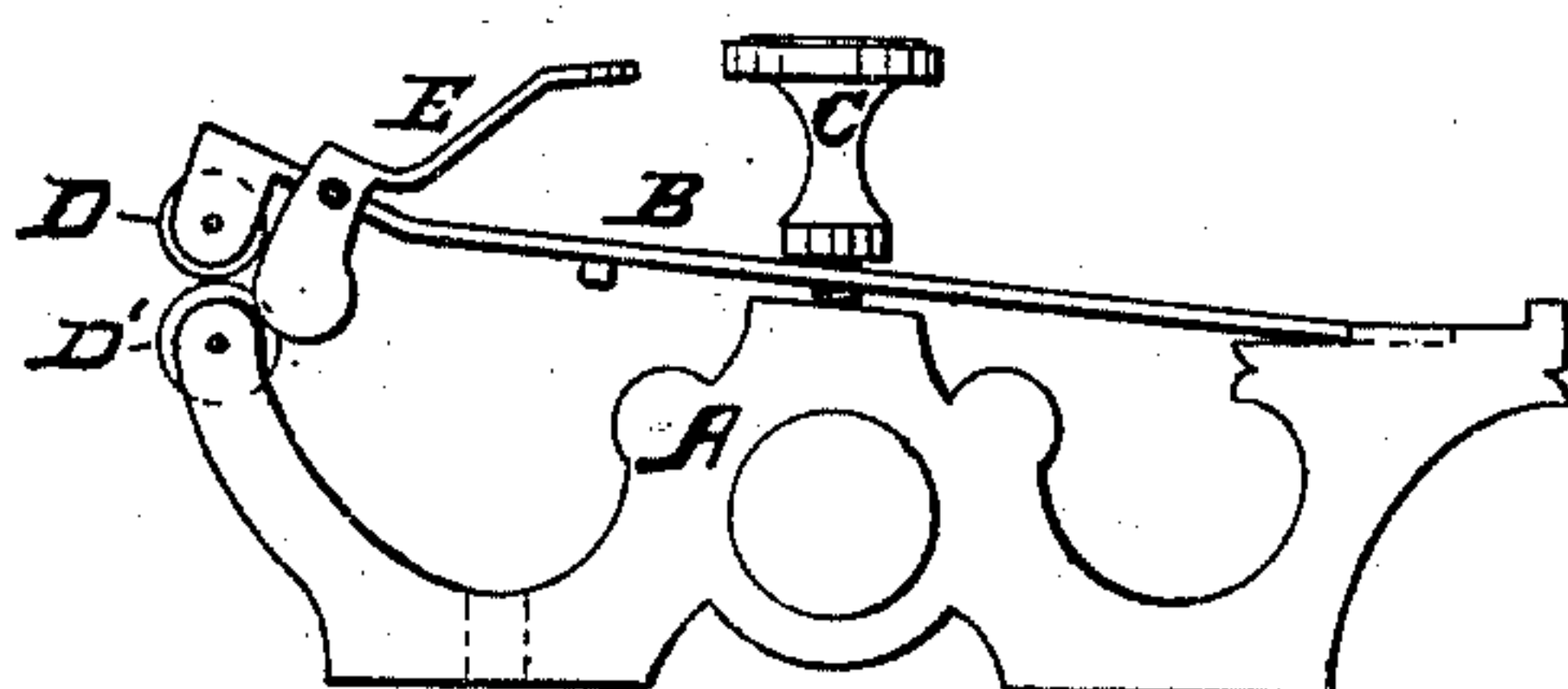


Fig. 3.



Witnesses,
Henry Frankfurt,
J. B. Halpenny.

Inventor,
Gilbert A. Brady
per F. F. Warner -
his Attorney.

UNITED STATES PATENT OFFICE.

GILBERT A. BRADY, OF CHICAGO, ILLINOIS.

TENSION FOR SEWING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 277,449, dated May 15, 1883.

Application filed May 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, GILBERT A. BRADY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful
5 Improvements in Tensions for Sewing-Machines, of which the following, in connection with the accompanying drawings, is a specification.

10 In the drawings, Figure 1 is a side elevation of a sewing-machine tension embodying my invention. Fig. 2 is a top view thereof, and Fig. 3 is a side elevation of the same somewhat modified in construction.

Like letters of reference indicate like parts.
15 A represents a tension-stand. B and B' are tension-plates, and C is a tension-regulating screw. D and D' are anti-friction rollers, applied, respectively, to those ends of the tension-plates from which the thread is drawn when
20 the tension is in use, and it is to be understood that the thread then passes between the said rollers.

With the exception of the rollers B and B', the tension may be made in any way suited to
25 tensions of the class shown. For example, only one tension-plate need be employed, as indicated in Fig. 3, in which case the lower roller, D', may be applied directly to the tension-stand, as there shown; also, any well-known
30 or suitable release device or liberator may be employed. In the drawings, E represents a release device or liberator, which consists of a lever pivoted at one end, as shown in Figs. 1 and 2, to the plate B, and bearing near its cen-

tral part on the lower plate. In Fig. 3 this 35 lever is shown as pivoted between its ends to the only plate there shown, and its lower end is represented as bearing on the stand. It will be perceived that the rollers D and D' will in both cases be separated from each other enough 40 to liberate the thread by bearing down on the lever E.

Heretofore, so far as I am aware, the thread has been so pinched or pressed by tensions of this class that it was liable to be kinked behind 45 the point of compression, the pressure tending to unroll the twist and push it back, thus making the tension operate unevenly. The purpose of my present invention is to cure this defect, and this I am to accomplish by employing the 50 rollers D D' substantially in the manner shown and now described.

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

55 The combination, in a plate-tension for sewing-machines, of the anti-friction rollers D and D', a spring tension-plate, in the forward end of which is journaled one of the said rollers, located above and for contact with the other 60 of the said rollers, and the tension-screw C, all adapted for operation together, substantially as specified, and for the purposes set forth.

GILBERT A. BRADY.

Witnesses:

F. F. WARNER,
H. FRANKFURTER.