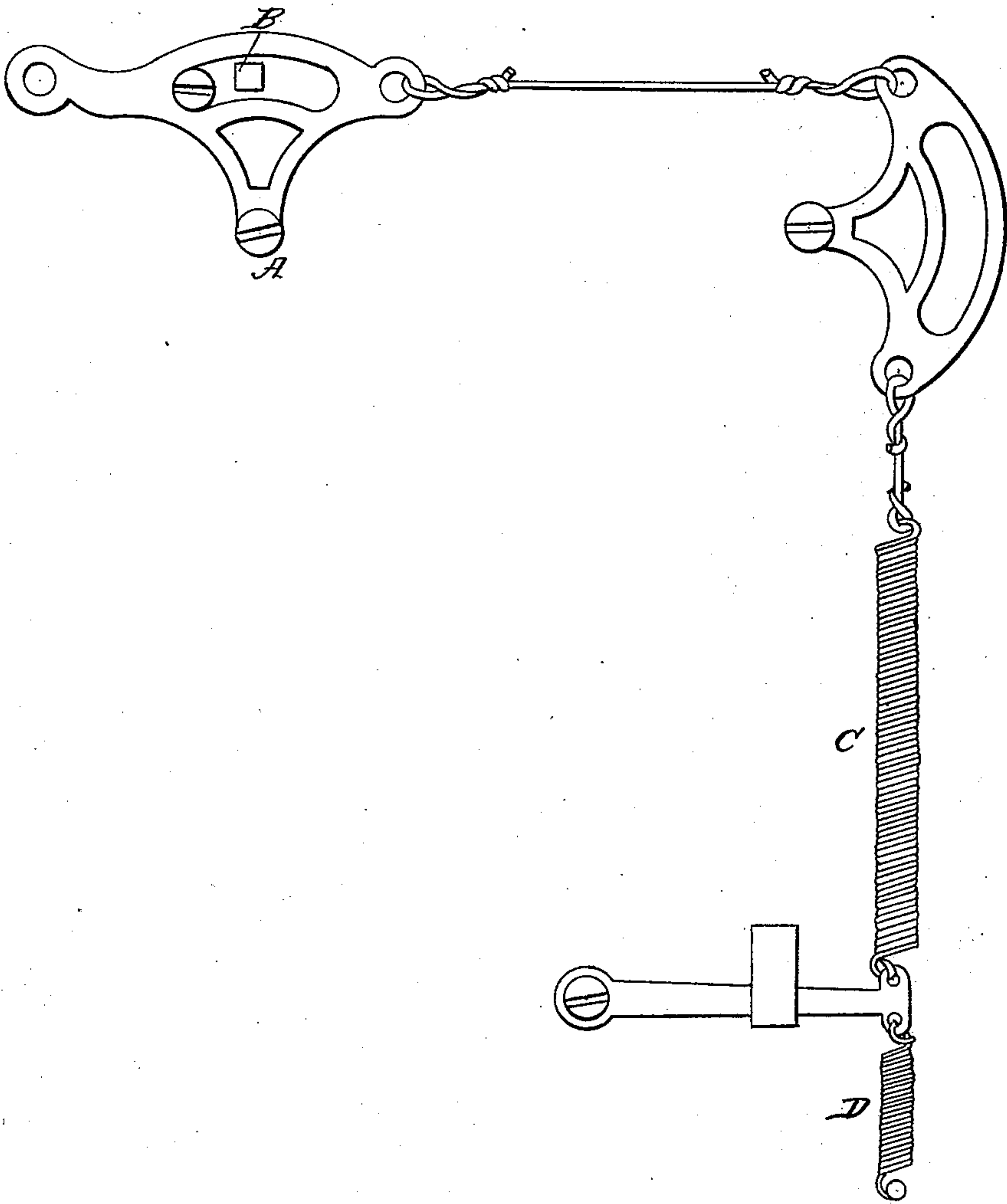


H. HOCHSTRASSER.

Hanging Bells.

No. 18,147.

Patented Sept. 8, 1857.



UNITED STATES PATENT OFFICE.

HENRY HOCHSTRASSER, OF PHILADELPHIA, PENNSYLVANIA.

ATTACHING WIRES TO BELL TELEGRAPHS.

Specification of Letters Patent No. 18,147, dated September 8, 1857.

To all whom it may concern:

Be it known that I, HENRY HOCHSTRASSER, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and Improved Mode of Attaching Wires to Bell Telegraphs, Annunciators, Watch-Clocks, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon.

The nature of my invention consists in having, (or placing) intermediate springs at any point between the machine, or parts of the machine, to be moved, and the purchase crank, or place of pulling (see drawing, letter A) so that if the wires are pulled, or moved, farther than the machine will admit the strain will come upon the intermediate springs, and not on the cranks, the wires or any part of the machine which is to be moved.

It is well known that the levers or cranks, within, and attached to Bell telegraphs, watch clocks, &c., are required to be moved a certain definite distance, and are not effective until moved to the full extent of that distance, and to prevent injury to the work by overpulling, it has been customary to place a stop at the purchase crank (letter B), under those conditions if the wires are contracted by cold or stretched and slackened by constant pulling or other causes, they become inoperative, difficulties which my invention is intended to obviate. With watch clocks, if the preceding levers are not pulled

first, the succeeding ones are immovable, and consequently must result in injury to some part of the work, which indeed has often been the case. By the use of the intermediate springs all injury from that source is obviated.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation. Instead of as heretofore attaching the wires directly to the machine, I connect one end of a spiral spring, or its equivalent, (letter C) to the machine, or part to be moved, at any point intermediate between the machine and purchase, crank, or pull, and connect the other end of the spring to the wire leading from the pull, which spring must be stronger, stiffer, and less yielding than the spring in the machine (D) to which it may be connected, and consequently will yield only when the wire is pulled or drawn farther than the machine to which connected will admit. It is evident that no injury by overpulling can result under those conditions.

I do not claim any improvement, in this specification, on any machine to which the intermediate springs may be attached.

What I do claim and desire to secure by Letters Patent is—

The intermediate spring or its equivalent substantially as herein described.

HENRY HOCHSTRASSER.

Witnesses at signing:

DENNIS BREAD,
WILLIAMS OGER.