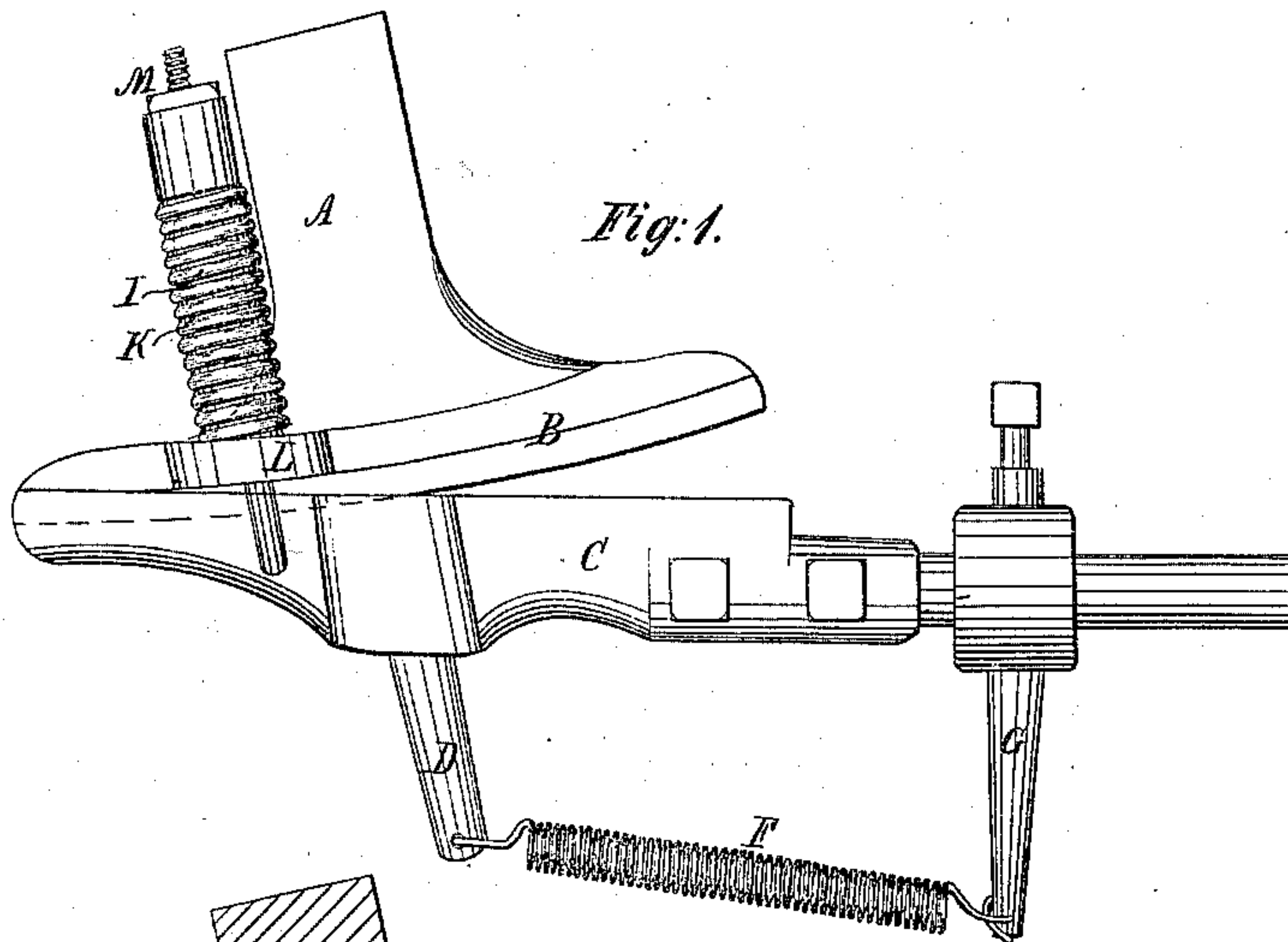


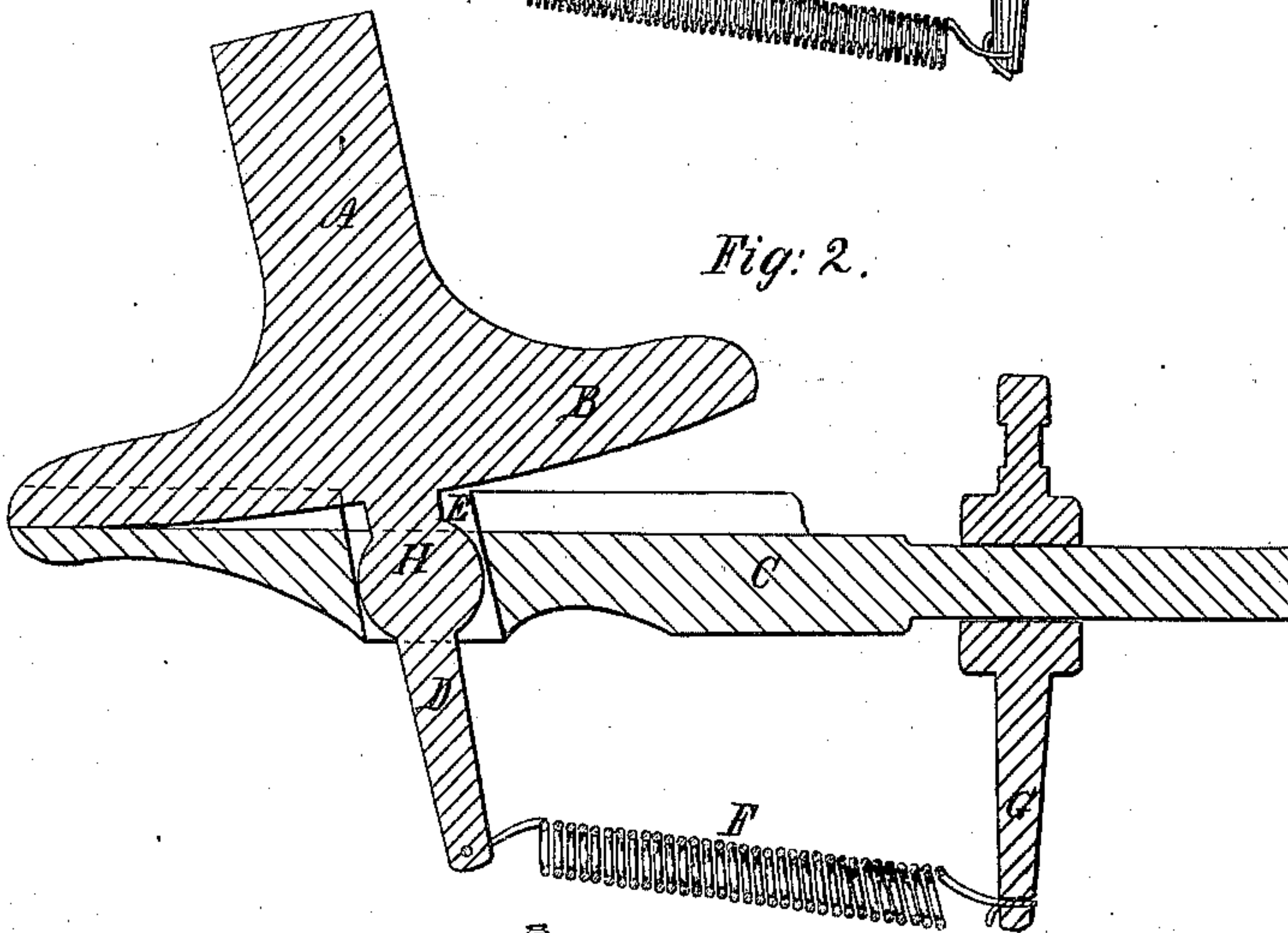
*S. Boorn.*  
*Picker Motion.*

*No 17,193.*

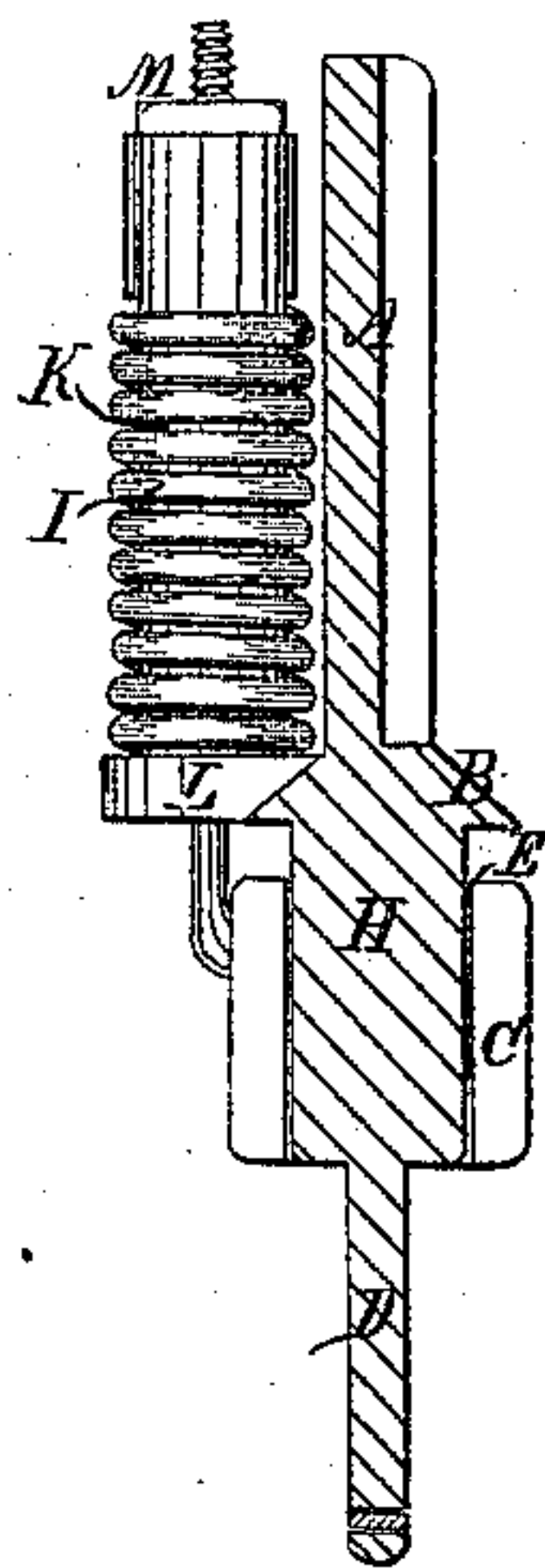
*Patented May 5, 1857.*



*Fig: 1.*



*Fig: 2.*



*Fig: 3.*

# UNITED STATES PATENT OFFICE.

SAMUEL BOORN, OF LOWELL, MASSACHUSETTS.

## PICKER-MOTION FOR LOOMS.

Specification of Letters Patent No. 17,193, dated May 5, 1857.

*To all whom it may concern:*

Be it known that I, SAMUEL BOORN, of Lowell, in the county of Middlesex and State of Massachusetts, have invented an Improved Picker Motion or Mechanism for Looms; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 denotes a side view of it; Fig. 2, a vertical, central and longitudinal section of it; Fig. 3, a transverse section taken through the picker staff.

My invention is applied to a picker staff which operates directly against the shuttle, the ordinary picker being dispensed with and the staff being furnished with a contrivance which will cause its striking part to travel in a straight line.

In the drawings, A, denotes the picker staff provided at its lower end with a curved rocker, B, that rests directly on the flat top of a support piece C. This rocker has such a curve given to it as will cause the upper part of the staff or that point which comes into contact with the nose or pointed end of the shuttle to travel in a straight and horizontal line. An arm, D, extends downward from the rocker and through a mortise, E, made through the support piece, a retractile spring, F, being fastened to the lower end of such arm and to a projection, G, from the said support piece. There is applied to the arm, D, a centralizer, H, which is a circular piece of metal having a diameter greater than the width of the arm, and equal to the width of the mortise, the said centralizer being made to extend from the arm as shown in Fig. 2. The object of the centralizer and its mortise is practically to maintain a uniform position of the lower part of the picker staff while the rocker is in

action to elevate or depress the staff, in order to cause its striking part or point to move in a straight line. By the action of the centralizer against the ends of the mortise the staff is allowed to rise and fall, and is duly controlled and sustained under the severe and sudden action of the mechanism by which it is impelled forward.

Besides the retractile spring above mentioned I sometimes employ another spring, I, so applied to the rocker and its support piece as to press the former down upon the latter, or prevent their separation or any injurious elevation of the picker staff which would be likely to result were the said spring not used. This spring is coiled about a rod, K, which extends upward from the support piece and turns or vibrates therein. It passes through an ear L, projecting from the rocker and has the spring placed in it and confined in place by a nut and screw as seen at M.

Long practice has proved that the above described picker motion is not only capable of operating with great precision, but is little liable to get out of order. It possesses great advantages in comparison with many others in common use, wherein the picker is dispensed with and the shuttle shown by the direct action and application of the staff.

I claim—

Arranging the centralizer and its mortise with the picker staff and its rocker so as to operate therewith as specified.

In testimony whereof, I have hereunto set my signature this twenty-fifth day of November, A. D. 1856.

SAMUEL BOORN.

Witnesses:

ISAAC C. EASTMAN,  
WILLIAM LAMSON, Jr.