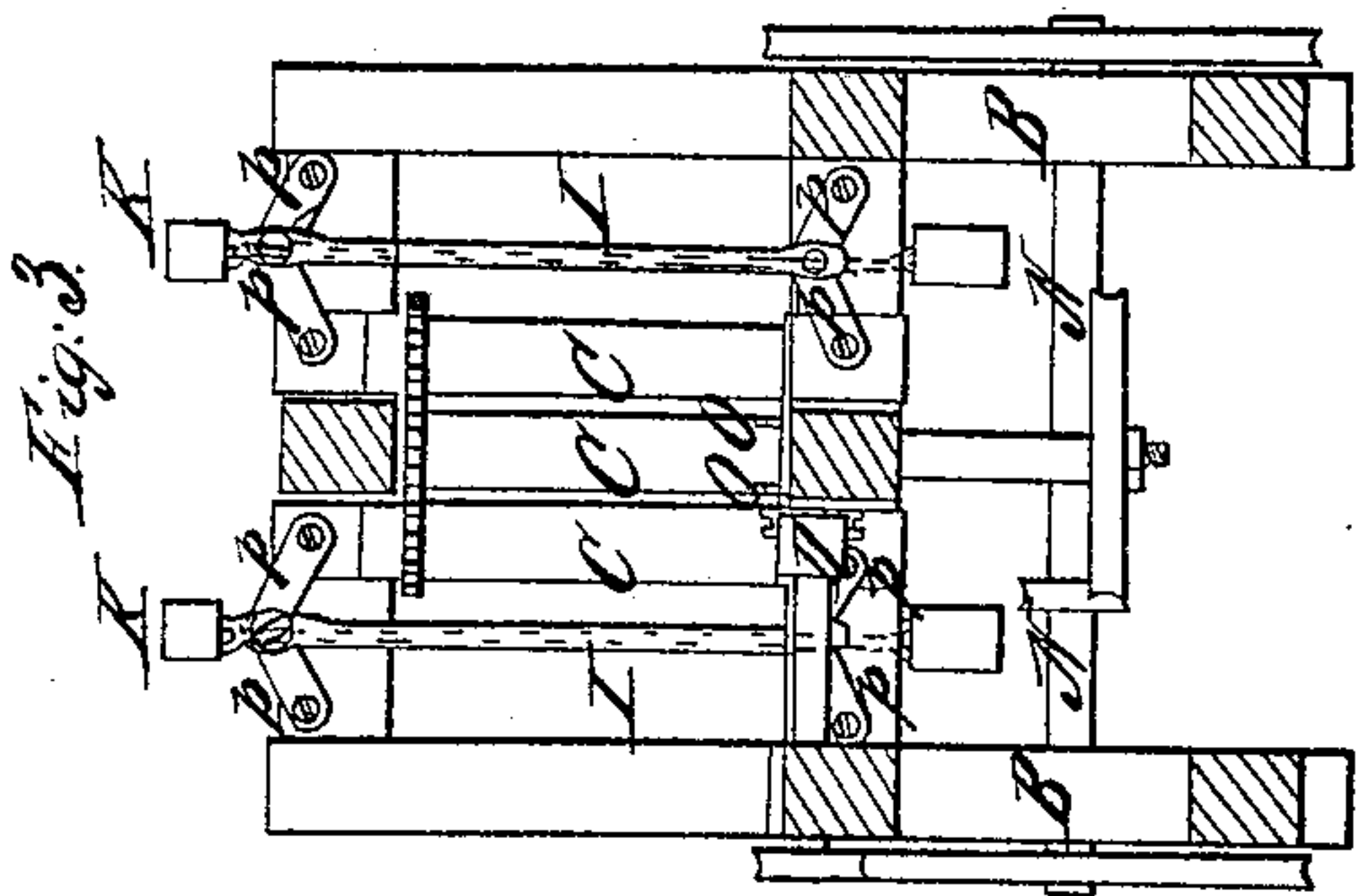
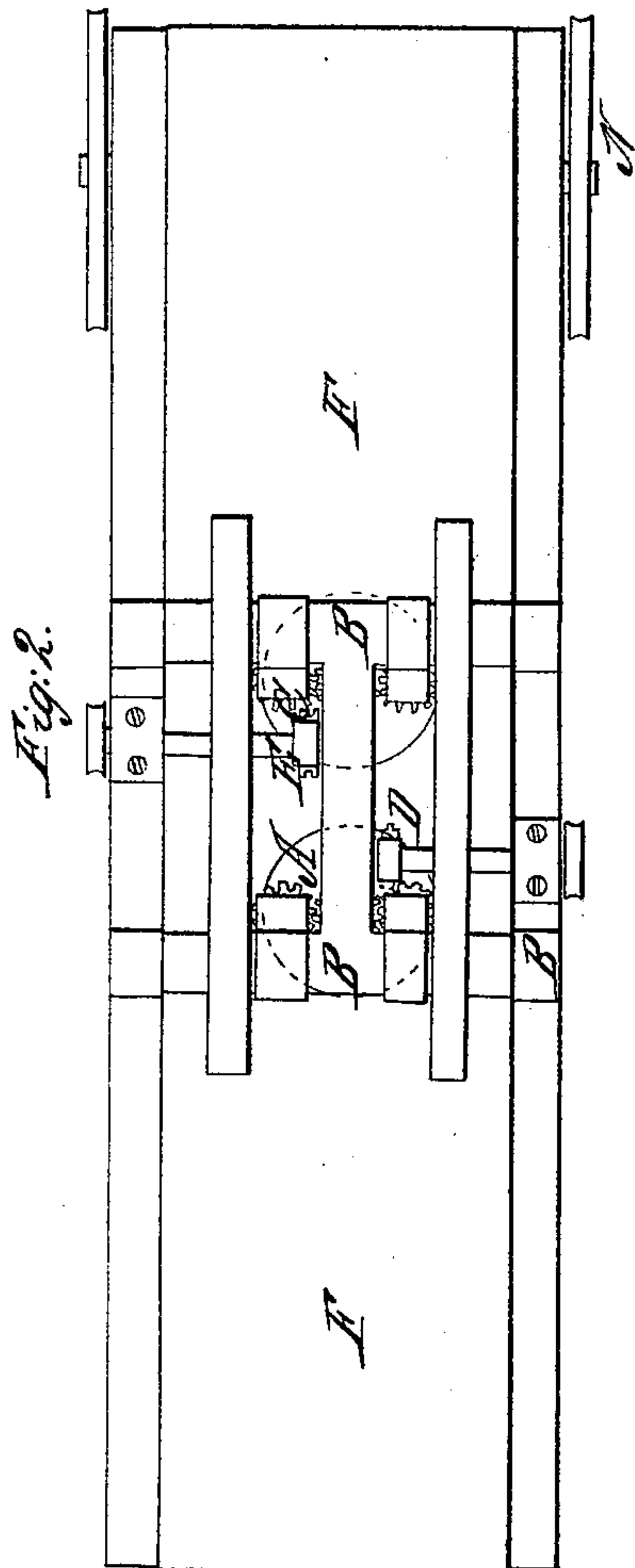
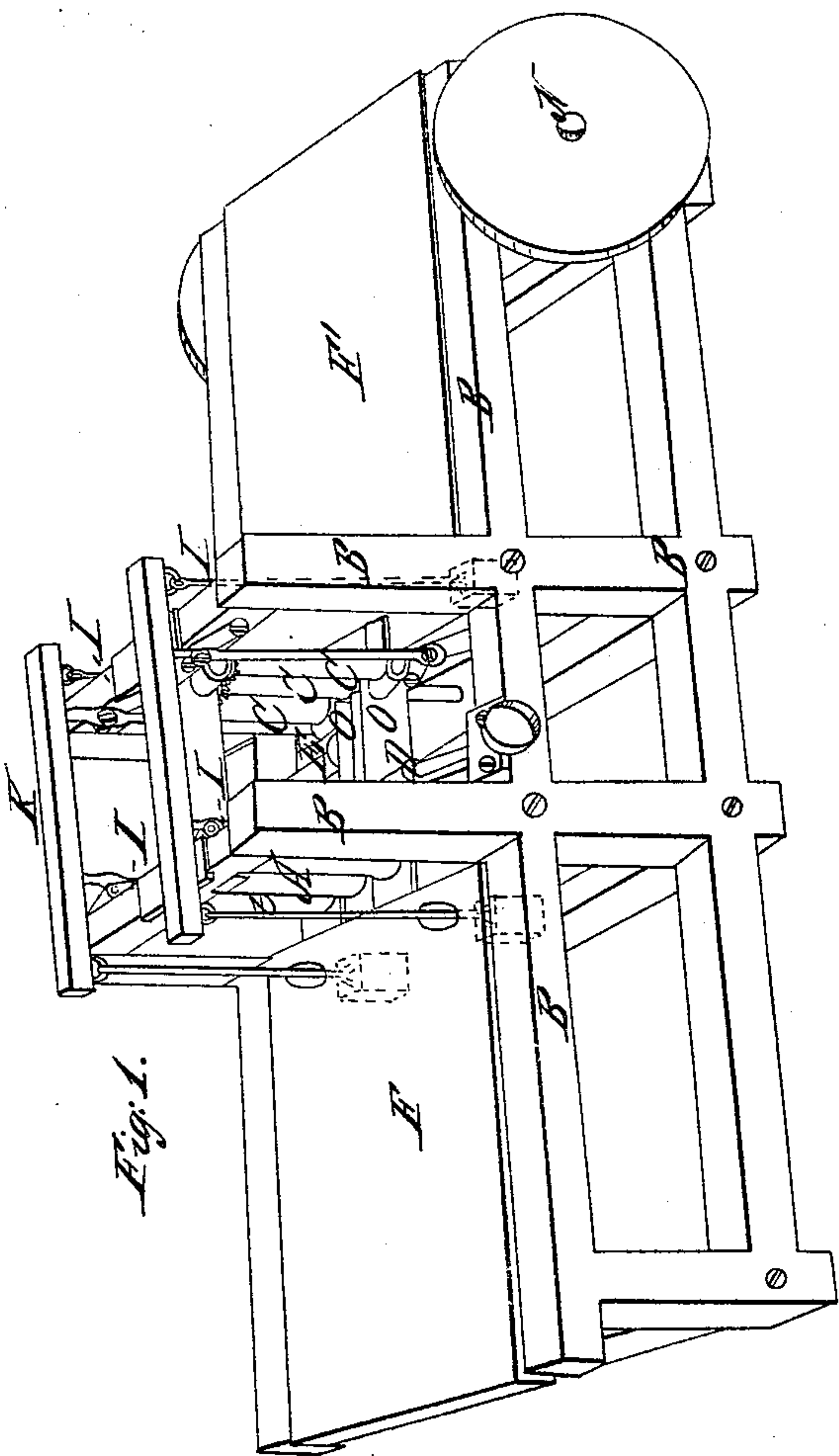


H. C. Wight,
Planing and Matching Machine.
N^o 14,038. Patented Jan. 1, 1856.



UNITED STATES PATENT OFFICE.

H. C. WIGHT, OF WORCESTER, MASSACHUSETTS.

ARRANGEMENT OF FEED-ROLLERS FOR PLANING-MACHINES.

Specification of Letters Patent No. 14,038, dated January 1, 1856.

To all whom it may concern:

Be it known that I, HIRAM C. WIGHT, of the city and county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Machines for Matching Boards and Plank called a "Matching Machine;" and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the drawings herewith presented and to the letters of reference marked thereon, in which—

Figure 1 is a perspective section through the center, the same letters referring to the same parts in each.

To construct my improved matcher, make a frame B B so as to support two sets of feed rolls A, & C, and the cutters D and E between them, and extending each way to make the tables F F'. These tables make about two-thirds the length of the longest boards to be matched; below the table F' place the driving shaft N with pulleys to drive the cutters and one to drive the feed rolls. These feed rolls consist of a stationary one in the middle and a movable one each side as shown in Figs. 2, and 3, the bearings of each movable one being arranged with the jointed levers *p p* connected by rod I so as to move the ends of the same roll equally and keep its surface parallel with the stationary one, the rods I, I, I, I, supporting the weighted bars K, K, transfer through the levers *p p* the requisite pressure to the rolls; the stationary roll driving the others by gearing and receiving its

motion from the driving shaft N; between the stationary rolls place the guides O, O, on a line with their surfaces; the cutters may be of any of the common forms and on that account need no particular description.

The operation is after giving motion to the shaft N it drives the cutters and feed rolls, and placing the board or plank on the table resting on its edge pass the end to the feed rolls and it is carried through over the cutter matching its edge and the other rolls draw it clear through and then the operator turning it on its other edge passes it back, the other side of the middle roll thus matching each edge straight as it lies on the table, even though the board is much wider at one end than the other, the rolls being set at right angles with the tables do by the peculiar manner of governing their action draw straight on a line of the surface of the table.

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

I claim governing the motion of the movable feed rolls by means of the jointed-levers and connecting rod or its equivalent whereby I am enabled to keep their surfaces parallel with the middle one, and thereby feed the board on a line with the surface of the table, as above set forth.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

HIRAM C. WIGHT.

Witnesses:

JAS. G. ARNOLD,
E. G. ARNOLD.