

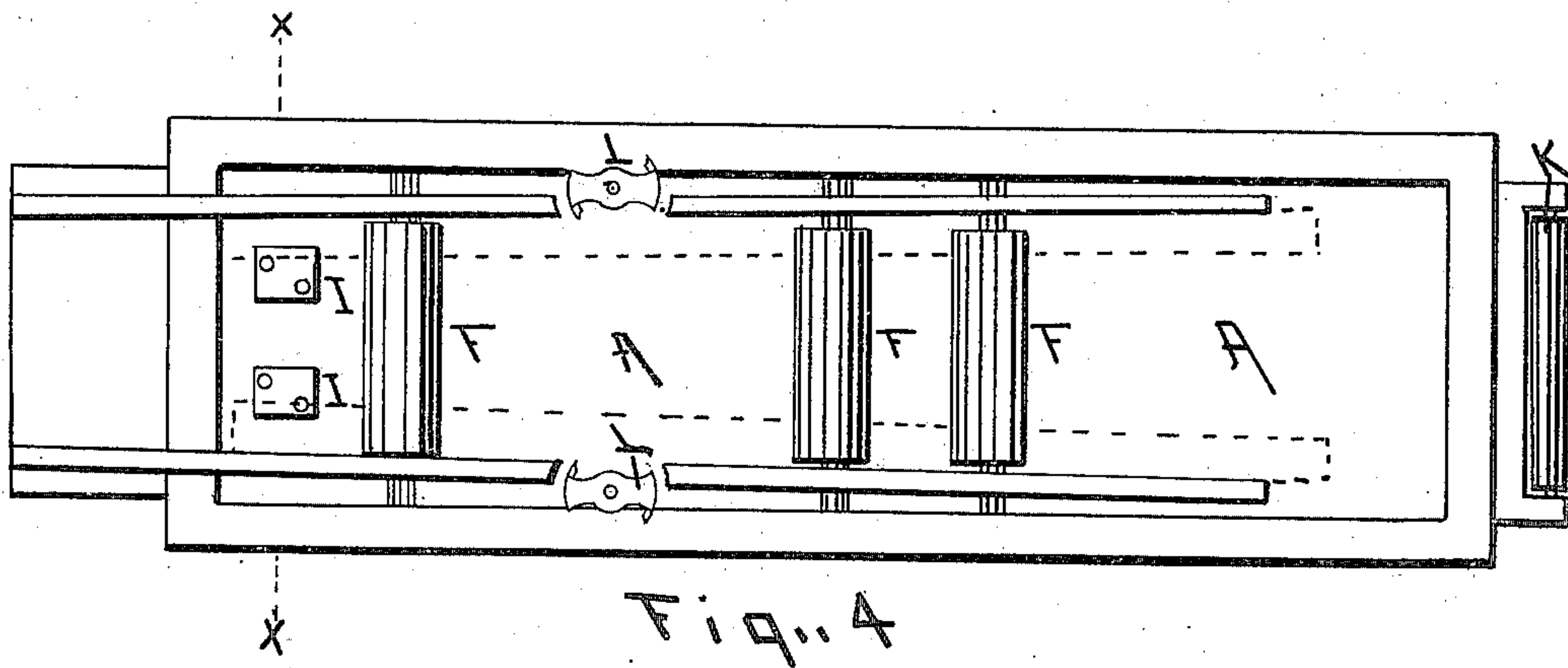
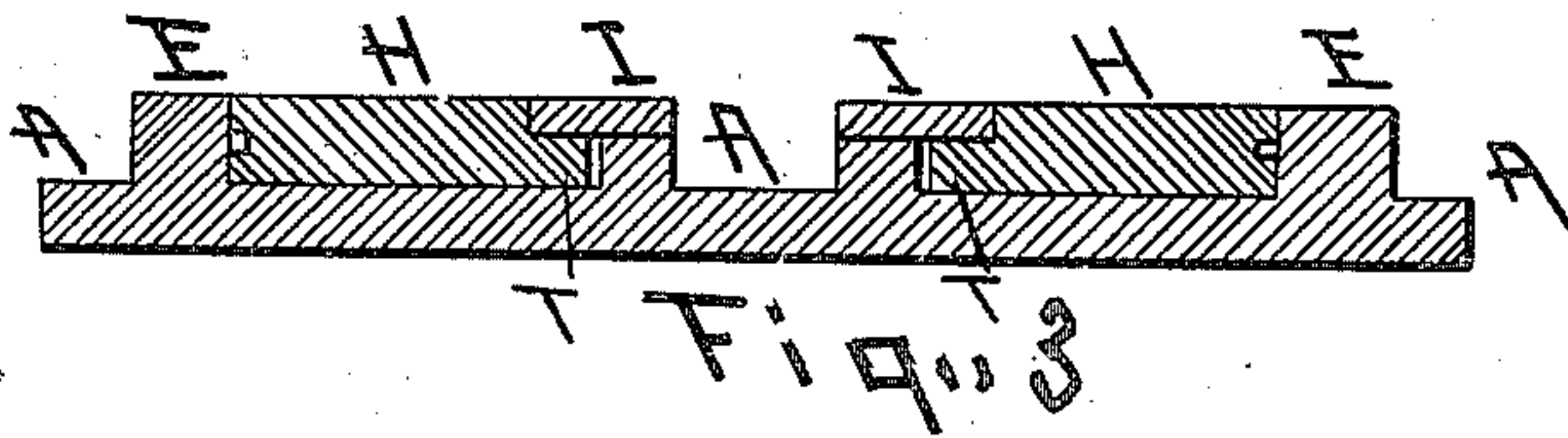
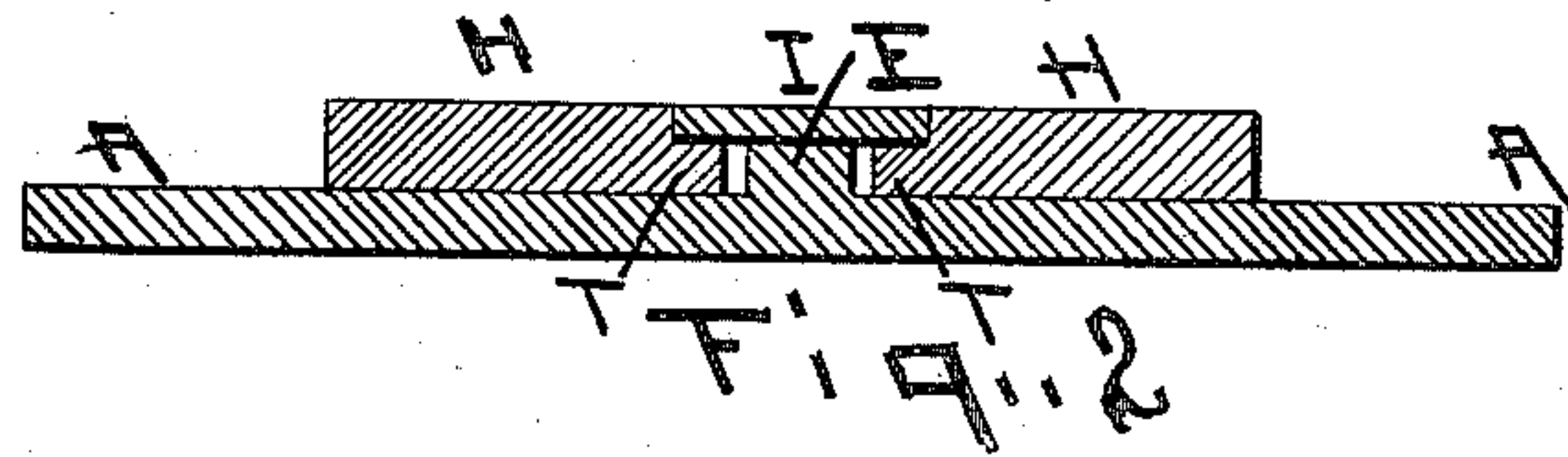
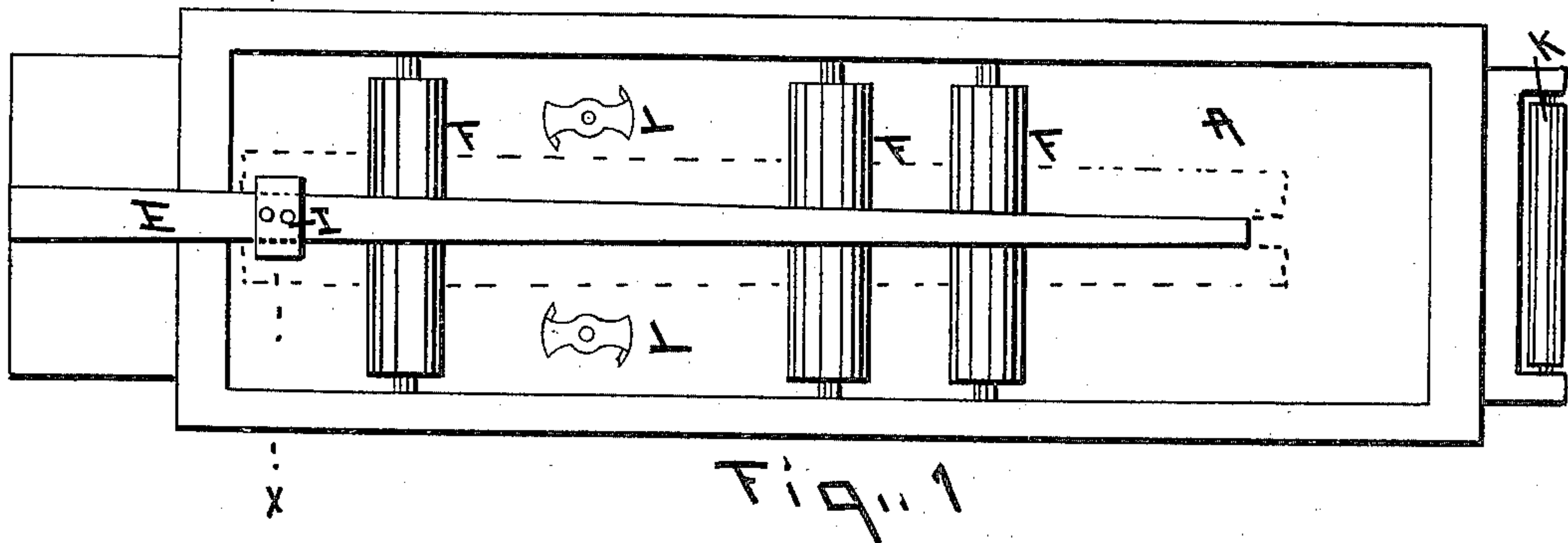
(No Model.)

W. M. DWIGHT.

GUIDE FOR PLANING AND MATCHING MACHINES.

No. 363,322.

Patented May 17, 1887.



ATTEST
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UNITED STATES PATENT OFFICE.

WILLIAM M. DWIGHT, OF DETROIT, MICHIGAN.

GUIDE FOR PLANING AND MATCHING MACHINES.

SPECIFICATION forming part of Letters Patent No. 363,322, dated May 17, 1887.

Application filed June 27, 1885. Renewed December 6, 1886. Serial No. 220,826. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. DWIGHT, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful
5 Improvement in Guides for Planing and Matching Machines, of which the following is a specification.

My invention relates to planing and matching machines of the class shown in my Patent
10 No. 309,339, and the patent of James A. Roberts, No. 308,801; and it consists in the combination, with such machines, of a supplemental guide or guides adapted to bear against the finished shoulder left on the upper side of
15 a board after the upper half of the tongue has been formed and guide the board in the exact position for finishing the tongue.

Figures 1 and 4 are plan views with the upper feed-rolls and the planing-cylinders omitted,
20 and Figs. 2 and 3 are cross-sections.

My invention is designed for use in planing and matching machines in which, as a board passes through the machine, the upper half of the tongue is formed by a knife carried by the
25 upper cylinder and the lower half of the tongue is formed by a knife carried by the lower cylinder.

A represents the bed of the machine; F, the lower feed-rolls, of three pairs commonly used;
30 L, the ordinary grooving-cutters, and E the guide.

In Fig. 1, taken from my patent above referred to, there is one central guide, E, adapted to guide two boards simultaneously, one on each side; and in Fig. 4, like the Robert's patent, there are two guides E, one at each side
35 of the machine.

I represents a supplemental guide, which, when the central guide, E, is used, may be
40 made integral with said guide or may be bolted

to said guide, or may be secured to the machine in any suitable manner. This guide I is short, and I usually place it almost over the under cylinder.

Guide I is made, as shown in Figs. 2 and 3, 45 in the form of an inverted L; so that it will project over the partially-formed tongue T on the board H and bear against the finished shoulder at the base thereof, and will therefore bring the board in the exact position necessary for the tonguing-knife on the under cylinder to cut the lower half of the tongue to correspond with the finished upper half. The
50 guide I also serves to aid in holding the board firmly down on the bed of the machine while being operated upon by the under cylinder. 55

When two guides E are used, as in Fig. 4, the supplemental guides I are two in number, and are bolted to the bed of the machine between guides E, as shown in Fig. 4. They
60 there perform their office, as before explained.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a planing and matching machine, the combination, with the bed A and guide E, secured
65 thereto, of a supplemental guide, I, consisting of a plate located at the rear of the machine, above the bed thereof, and projecting at a right angle to guide E over the path of the board to be operated upon, so that its end will bear
70 against the shoulder of the finished portion of a tongue on the upper side of the board and guide the latter in its position for the under portion of the tongue to be cut, substantially as described.

WILLIAM M. DWIGHT.

Witnesses:

CHARLES B. LOTHROP,
GEO. H. LOTHROP.