

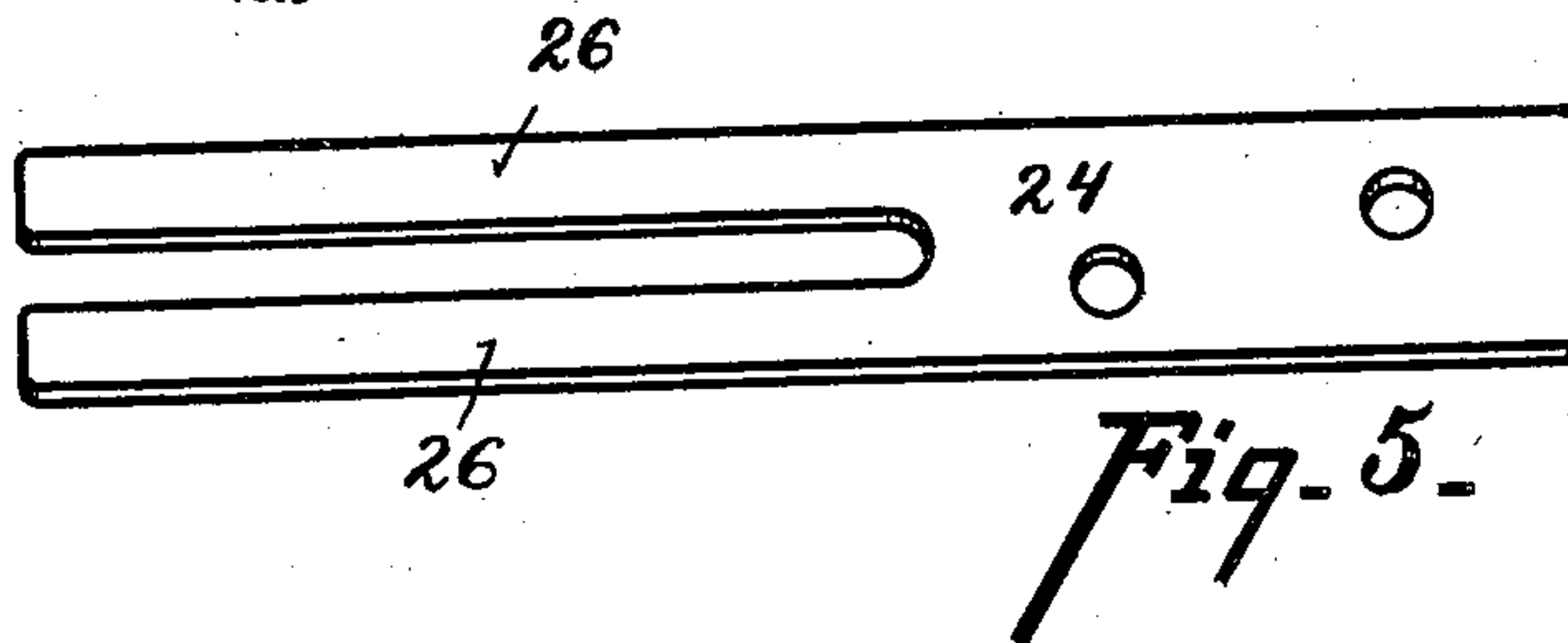
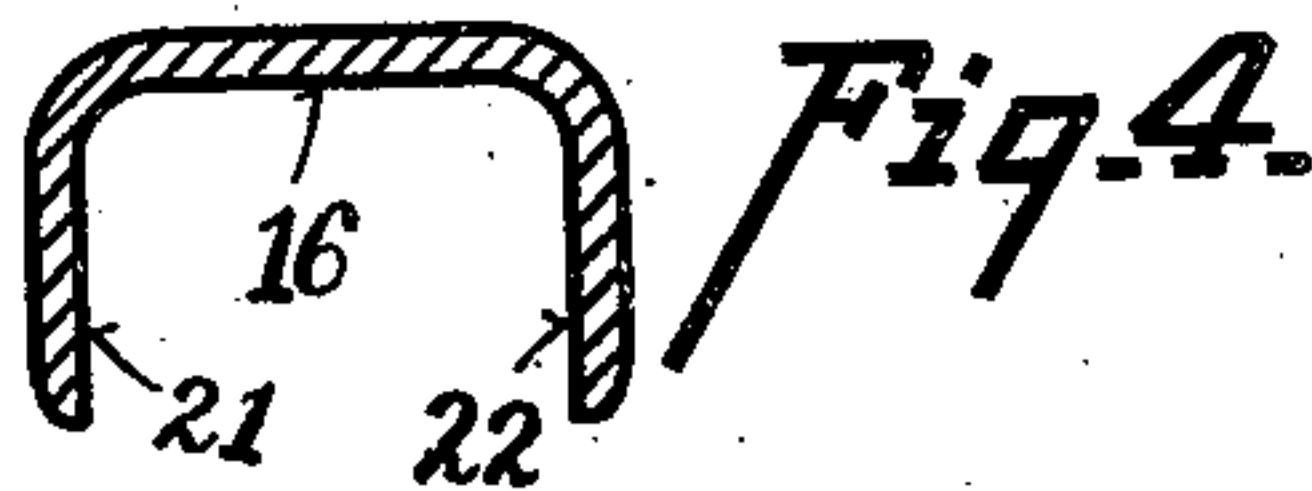
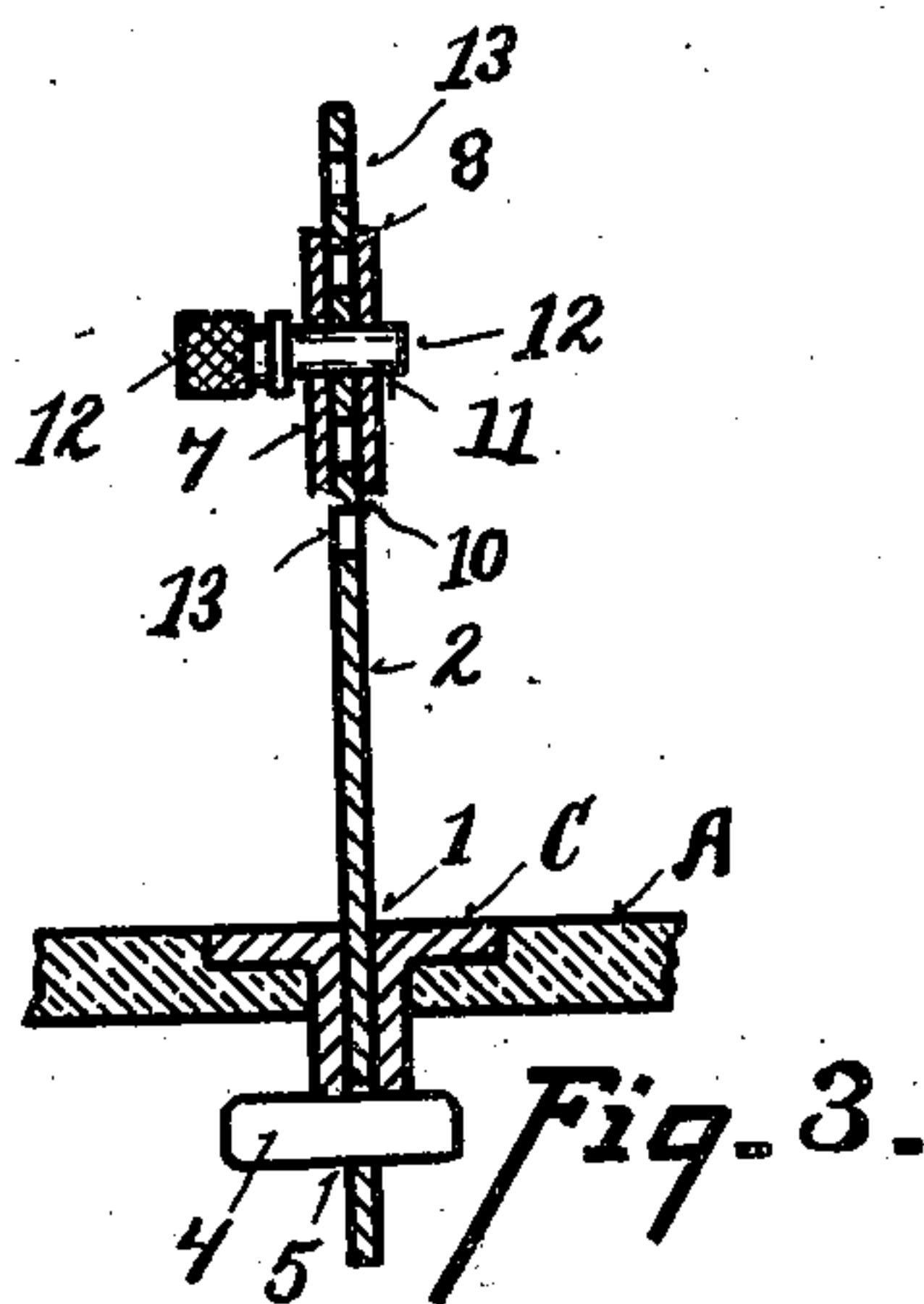
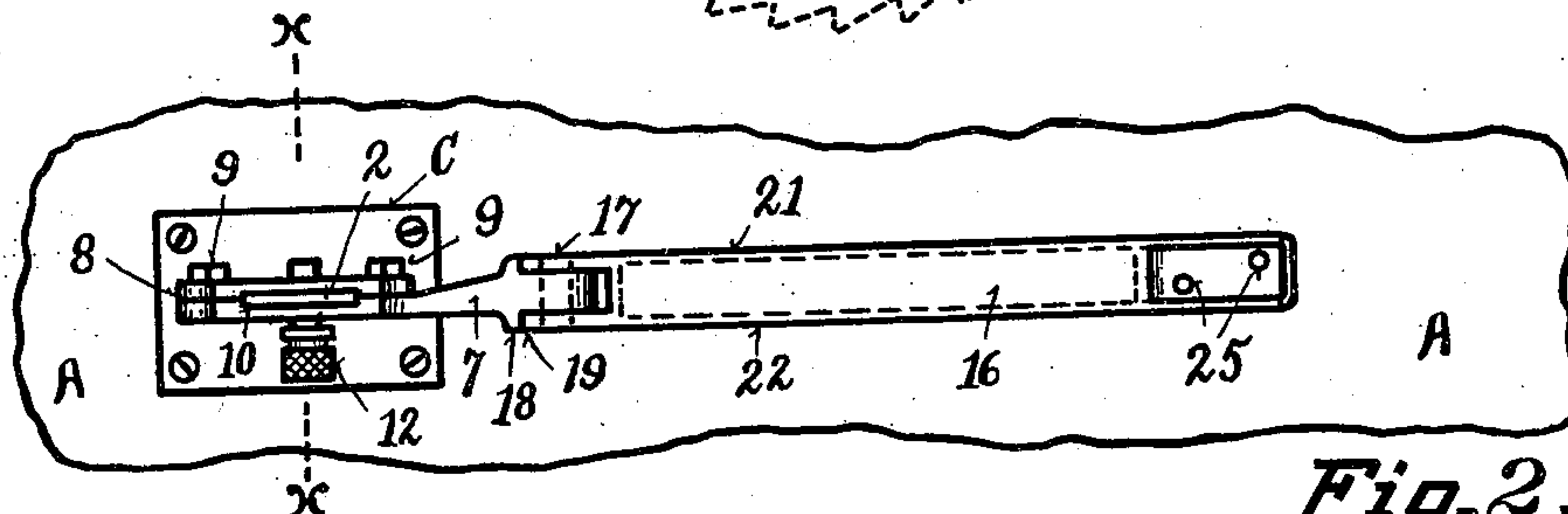
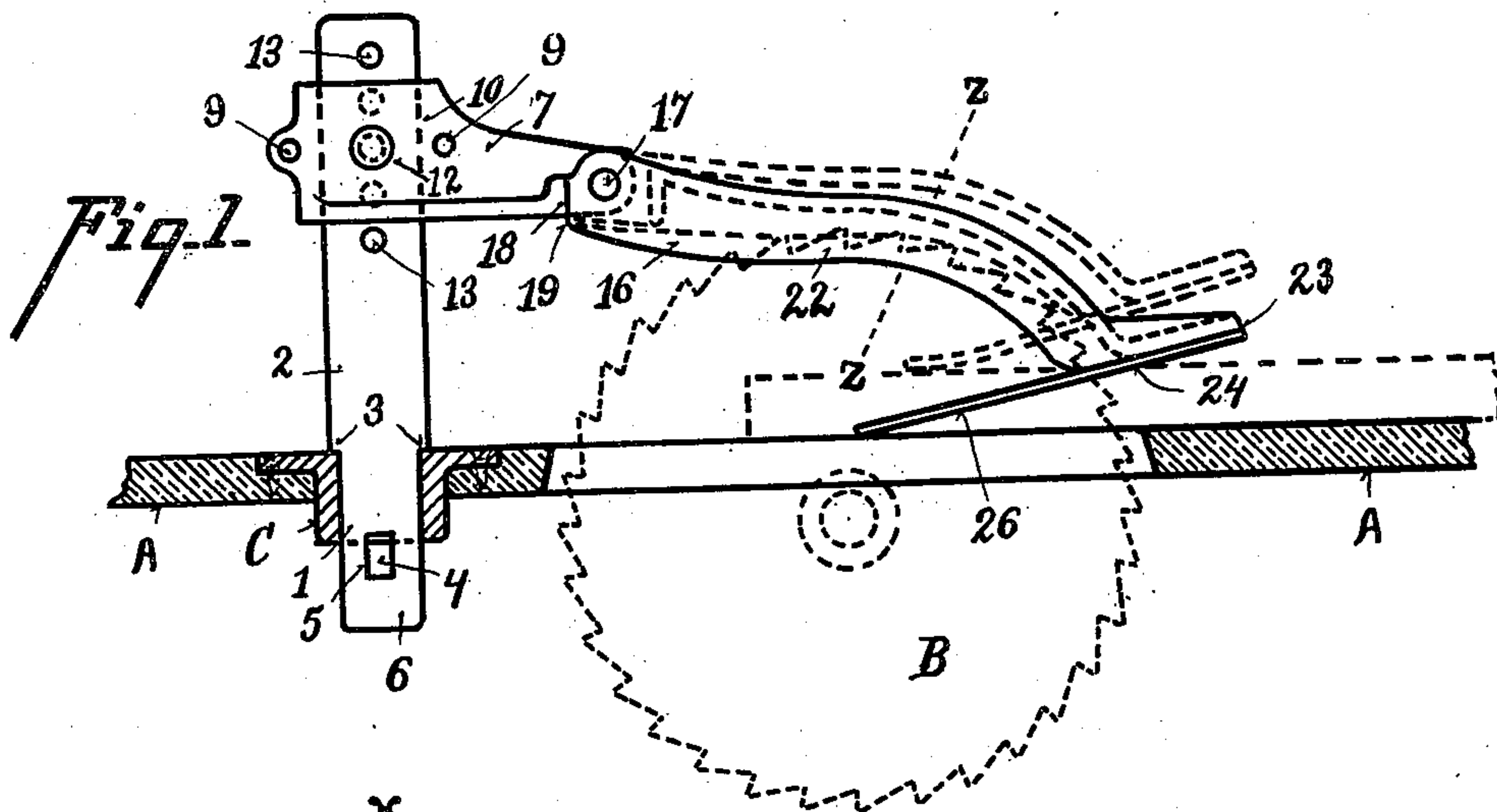
No. 648,000.

Patented Apr. 24, 1900.

J. R. THOMAS.  
SAW GUARD.

(Application filed Feb. 5, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

JOHN R. THOMAS, OF CINCINNATI, OHIO, ASSIGNOR TO THE J. A. FAY & EGAN COMPANY, OF SAME PLACE.

## SAW-GUARD.

SPECIFICATION forming part of Letters Patent No. 648,000, dated April 24, 1900.

Application filed February 5, 1900. Serial No. 4,062. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN R. THOMAS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Saw-Guards, of which the following is a specification.

My invention relates to saw-guards adapted to take over a circular saw to prevent the operator or others accidentally coming in contact with the saw-blade, to protect the saw-blade itself from injury, and to prevent pieces of stock or slivers of wood from being thrown back by the saw-blade.

It is the object of my invention to provide a saw-guard that is cheap in construction and durable, that has few parts, and is simple in operation.

My invention consists in providing a swinging arm adapted to take over the saw-blade, provided at its feeding-in end with an inwardly and downwardly projecting plate extending to the side substantially beyond the periphery of the saw-blade, against which the stock is adapted to take and raise the saw-guard, and, further, in the parts and in the construction, arrangement, and combinations of parts hereinafter more fully described and claimed.

In the drawings, Figure 1 is a side elevation of my improved device, showing the same connected to a saw-table, with the socket for the kerf-plate and the saw-table shown in longitudinal section, with the saw-blade indicated in dotted lines, and an assumed position for the arm, raised by a piece of stock, also indicated in dotted lines. Fig. 2 is a plan view of my improved device shown in connection with part of the saw-table. Fig. 3 is a cross-section on the line *xx* of Fig. 2. Fig. 4 is a cross-section of the arm on the line *zz* of Fig. 1, and Fig. 5 is a view in perspective of the plate.

A represents the table, and B a saw-blade.

C is a socket having a slot 1, into or through which a kerf-plate 2 may project, being fastened therein by having shoulders 3 on the kerf-plate taking against the upper end of the socket and a wedge 4 taking through an aperture 5 in the kerf-plate under the socket. The part of the kerf-plate taking through the

slot may be a reduced part 6 thereof. The socket is preferably countersunk in the table so that its upper surface may be flush therewith, and it is secured to the table by means of screws or other suitable means. I employ the socket where it is desired to secure the saw-guard with reference to a wood-top saw-table. Many saw-tables are, however, made of iron or other metal, and if it is desired to attach my improved saw-guard to a table of this kind my socket is preferably dispensed with, the slot being made direct in the table. This slot may also be cast in the table when the table is cast, in simple manner, by providing a core therefor.

A bracket 7 preferably takes about the kerf-plate and may be formed of the bracket proper and a plate 8, secured thereto by means of bolts 9, leaving an aperture or slot 10 in the bracket for the reception of the kerf-plate. The bracket preferably has holes 11 for the reception of a pin 12, which also takes through one of a series of holes 13 in the kerf-plate. The holes 13 in the kerf-plate may be placed at various heights to regulate the height of the bracket. The pin may be secured in the holes in any manner, if desired. The bracket has an arm 16 swinging therefrom, as on a pin 17. The bracket and arm are provided with shoulders or meeting faces 18 and 19 to limit the descent of the outward end of the arm. The arm is adapted to take over the saw-blade and may be provided with depending sides 21 22, taking about the periphery of the saw-blade. The arm preferably has a curvature to correspond to the mean periphery of the saw-blades. Its feeding-in end is preferably slanted upwardly and outwardly to form an inclined face 23, to which a plate 24 may be secured, as by means of rivets 25. This plate is preferably a bifurcated plate, as shown in Fig. 5, with the free ends or prongs 26 of the plate taking to both sides of the saw-blade, preferably extending a substantial distance toward the middle of the saw-blade when in normal position and adapted to maintain contact with the stock within the circle of the periphery of the saw-blade when raised by the stock. The plate forms an inclined inwardly-depending bearing-surface for the stock to take



against when being fed into the machine, and as the stock is being pushed into the machine it is adapted to raise the free end of the guard-arm to accommodate the latter to the thickness of the stock. The plate is preferably a spring-plate and, with the weight of the arm, forms a pressure on the stock and also prevents slivers or stock from flying back.

In my improved construction I am enabled to provide a long incline for the plate with slight angle against which the stock may take, so as to present little, if any, resistance to feeding the stock into the machine, while providing an effective protection both to the operator and the saw-blade and preventing stock or slivers from flying back. The saw-guard accommodates itself readily to different diameters of saw-blades by means of the adjustment provided at the kerf-plate. The kerf-plate extends upwardly from the saw-table to rear of the saw-blade and takes into the kerf left by the blade in the stock, the kerf-plate being preferably of a thickness slightly thinner than the smallest set or kerf used on the machine.

I claim—

1. In a saw-guard, the combination of an arm arranged for swingingly extending over a circular-saw blade, and an inwardly and

downwardly projecting plate at the free end of the arm, projecting substantially beyond the periphery line of the saw-blade, substantially as described.

2. In a saw-guard, the combination of a kerf-plate, with an arm having depending sides swingingly extended therefrom for taking over a circular-saw blade, and a plate or plates extending downwardly and inwardly from the free end of the arm, substantially as described.

3. In a saw-guard, the combination of a table, a kerf-plate, with a bracket, and means for adjusting the bracket into different positions above the table on the kerf-plate, with an arm arranged for swingingly extending above a circular-saw blade, an inclined upwardly and outwardly extending face at the free end of the arm, and an inwardly and downwardly projecting spring plate or plates extending to both sides of the saw-blade, substantially as described.

In testimony whereof I have signed my name hereto in the presence of two subscribing witnesses.

JOHN R. THOMAS.

Witnesses:

PARKE S. JOHNSON,  
PHILIP W. TOZZER.