

No. 876,005.

PATENTED JAN. 7, 1908.

W. MASON.
SHUTTLE CHECK FOR LOOMS.
APPLICATION FILED MAR. 5, 1907.

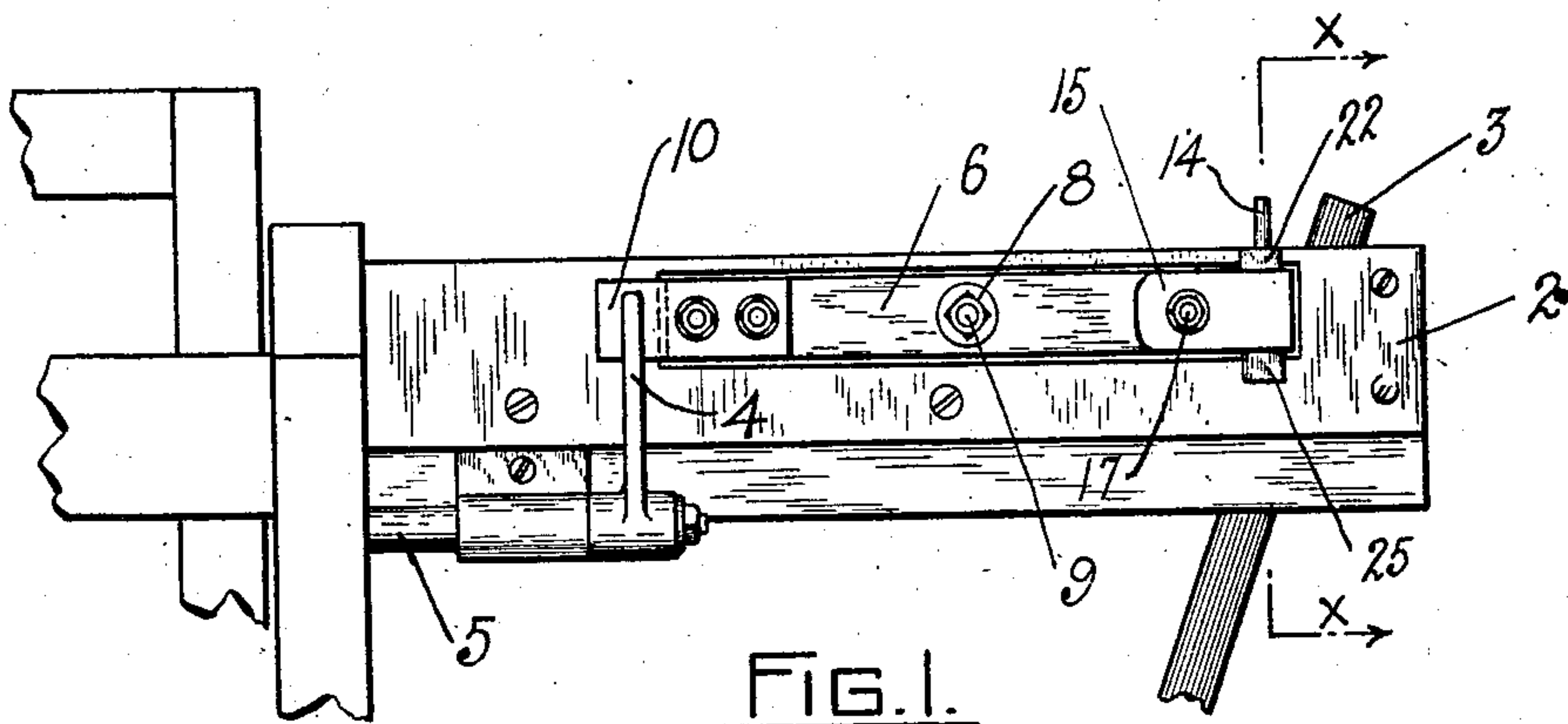


FIG. 1.

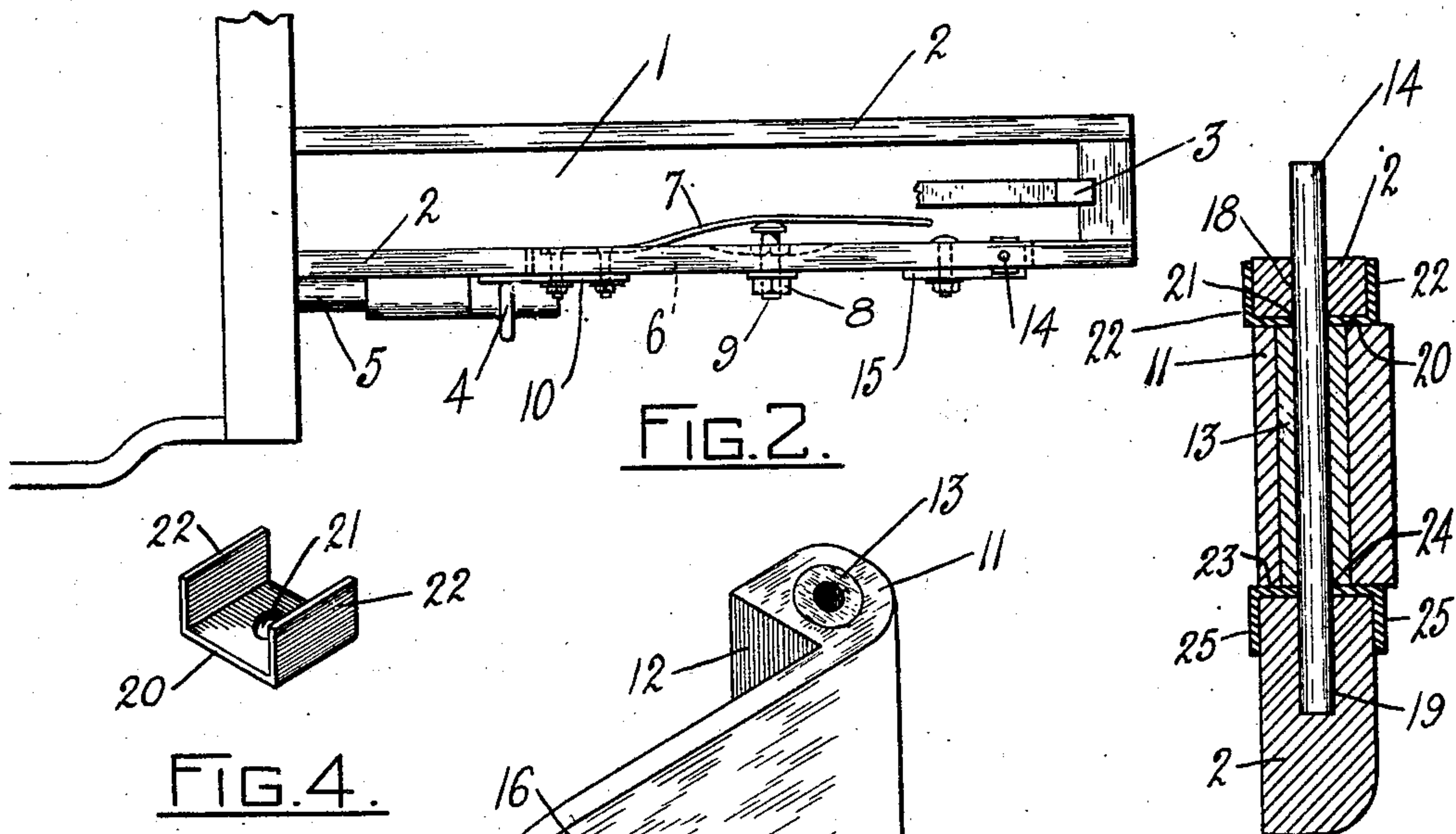


FIG. 2.

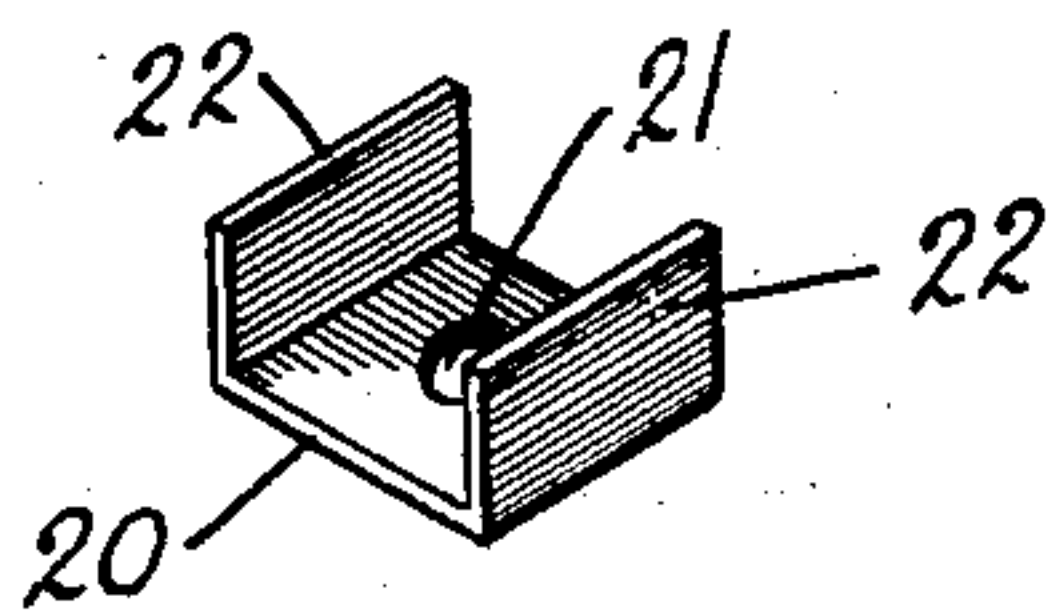


FIG. 4.

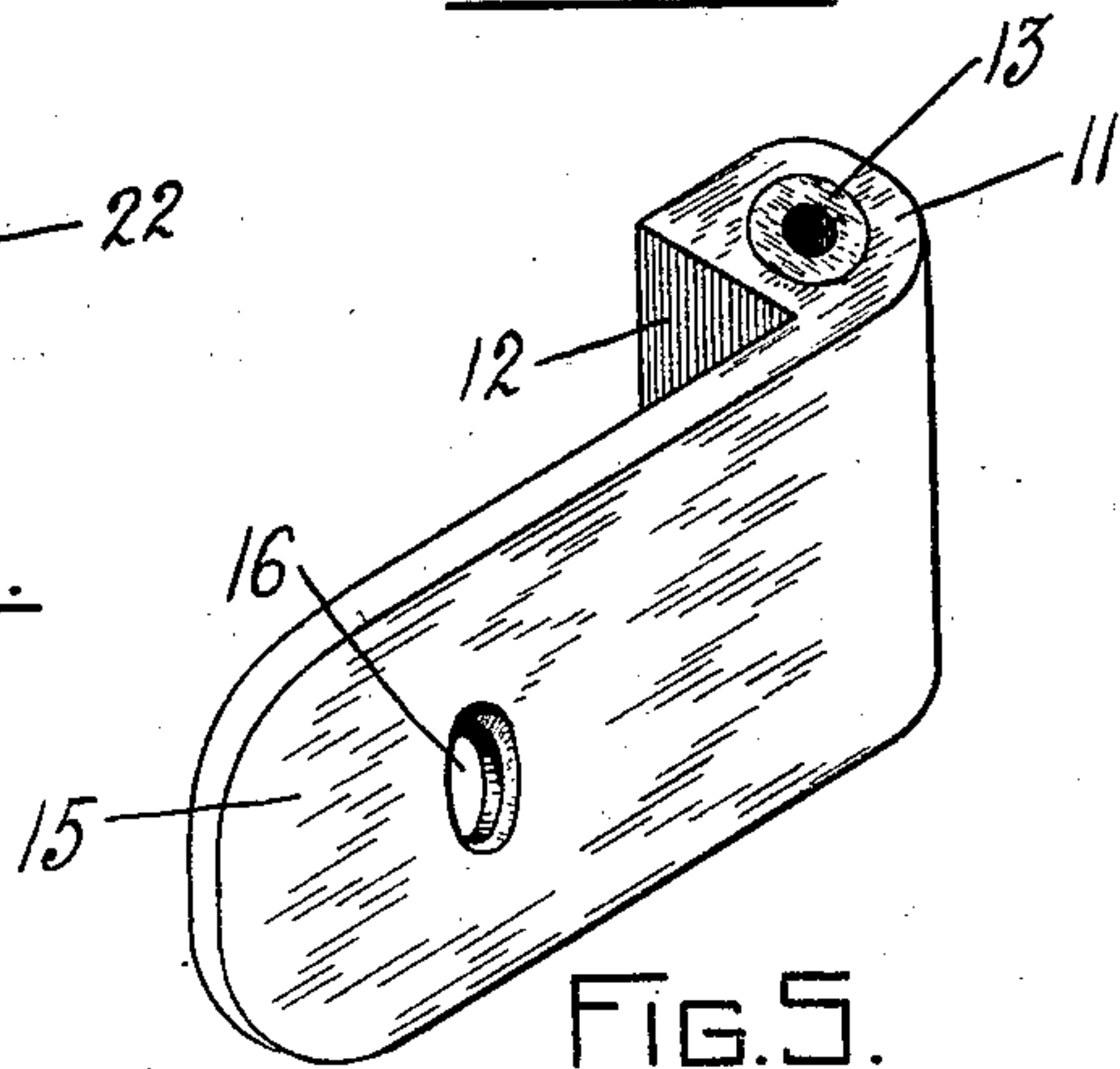


FIG. 5.

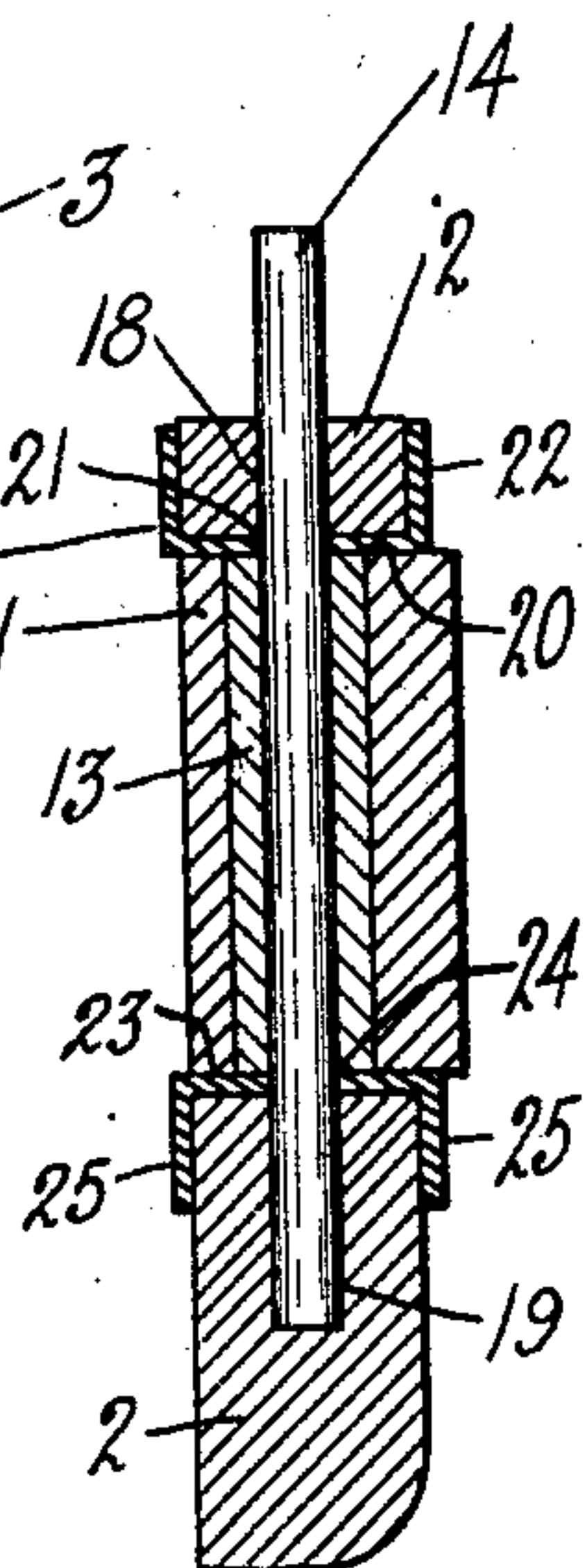


FIG. 3.

WITNESSES.

A.G. Pieczentkowski.

Walter E. Goodwin.

INVENTOR.

William Mason

By Norato E. Bellome

ATTORNEY.

UNITED STATES PATENT OFFICE.

WILLIAM MASON, OF PAWTUCKET, RHODE ISLAND.

SHUTTLE-CHECK FOR LOOMS.

No. 876,005.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed March 5, 1907. Serial No. 360,729.

To all whom it may concern:

Be it known that I, WILLIAM MASON, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Shuttle-Checks for Looms, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates particularly to shuttle-boxes comprising shuttle-brakes, checks, or binders, and has for its primary objects the avoidance of wearing, fracturing, and mutilating the shuttle and adjacent parts of the shuttle-box, or binder; and the maintenance of the shuttle-binder against transverse inclination or other displacement which would tend to present the latter at an angle to the surface of the shuttle.

To the above ends my invention consists essentially in so constructing the pivotal connection of the binder as to insure the pivot and the parts adjacent thereto against wear and abrasion.

In the drawings which constitute a part of this specification, Figure 1 is a front view of a shuttle-box embodying my invention. Fig. 2, a top plan of the same. Fig. 3, a transverse section on line *x x* of Fig. 1. Fig. 4, a detail view of one of the bearing plates, and Fig. 5, a perspective view of the hinge plate member.

Like reference characters indicate like parts throughout the views.

In the drawings, 1 is a shuttle box provided with the front wall, 2; 3 is the picker-stick, and 4 the usual bearing finger upon the protector rod, 5. The shuttle-binder, 6, is provided with the binder-spring, 7, and its adjusting nut, 8, and screw, 9.

10 is the bearing plate for the finger, 4, fixed to the binder, 6.

Upon the end of the shuttle-binder, 6, opposite the plate, 10, is a hinge or pivot member consisting of a metallic semi-cylindrical body portion, 11, having a plane inner face, 12, and provided with a vertical axial bushing, 13, of hard metal, preferably hardened steel, adapted to receive a pivot pin, 14, also of hardened steel. Integral with the body, 11, is the ear or hinge plate, 15, provided with one or more openings, 16, for receiving the attaching screw, 17, which

unites the hinge member with the shuttle-binder. The end of the binder rests against the plane surface, 12, of the hinge body.

Above and below the hinge member the wall, 2, is provided with openings, 18 and 19, respectively, in axial alinement with the bushing, 13. The pin, 14, traverses the opening, 18, the bushing, 13, and rests in the opening, orifice, or seat, 19.

A bearing or clamping plate, 20, has a perforation, 21, and lateral flanges, 22. This plate is frictionally engaged by its flanges 21, with the front wall, 2, immediately above and in contact with the upper end of the hinge member; the pin, 14, passing through the perforation, 21. A similar bearing or clamping plate, 23, with perforation, 24, and flanges, 25, is fixed to the wall, 2, in like manner intermediate the lower end of the hinge member and the wall, and permits the passage of the pin, 14, through the perforation, 24. If preferred the flanges, 22 and 25, of the plates may be fixed to the wall, 2, by screws or other fastening means, instead of by friction.

The pivot pin is of sufficient length to project above the shuttle-box wall to facilitate its easy manual removal and the release of the shuttle-binder when desired.

It will be noted that the pivotal parts as thus constructed combine to form a firm and easily operated, pivotal connection, free from wear and from the resulting derangement of plane of the shuttle-binder. Furthermore, the plates, 21 and 23, protect the wall from the wear and abrasion of the adjacent hinge member and to an extent act as guides to the pin, 14.

What I claim is,

1. In a shuttle box, the combination with the front wall and the shuttle-binder, of a metal hinge member upon the shuttle-binder and comprising a semi-cylindrical body portion with plain face and vertical pintle-bearing, and an integral hinge plate, the end of the binder resting against said plain face, and a pivot pin in said pintle-bearing and engaged in said front wall.

2. In a shuttle box, the combination with the front wall and the shuttle-binder, of a metal hinge member upon the shuttle binder and comprising a semi-cylindrical body portion with plain face and vertical pintle re-

ceiving opening, a bushing in said opening,
an integral hinge plate, the end of the binder
resting against the plain face of said plate,
a pivot pin in said opening and engaged in
5 said front wall, and clamping and bearing
plates engaging opposite ends of the said
body portion.

In testimony whereof I have affixed my
signature in presence of two witnesses.

WILLIAM MASON.

Witnesses:

CHARLES H. PAGE,
ARTHUR CUSHING.