

No. 881,613.

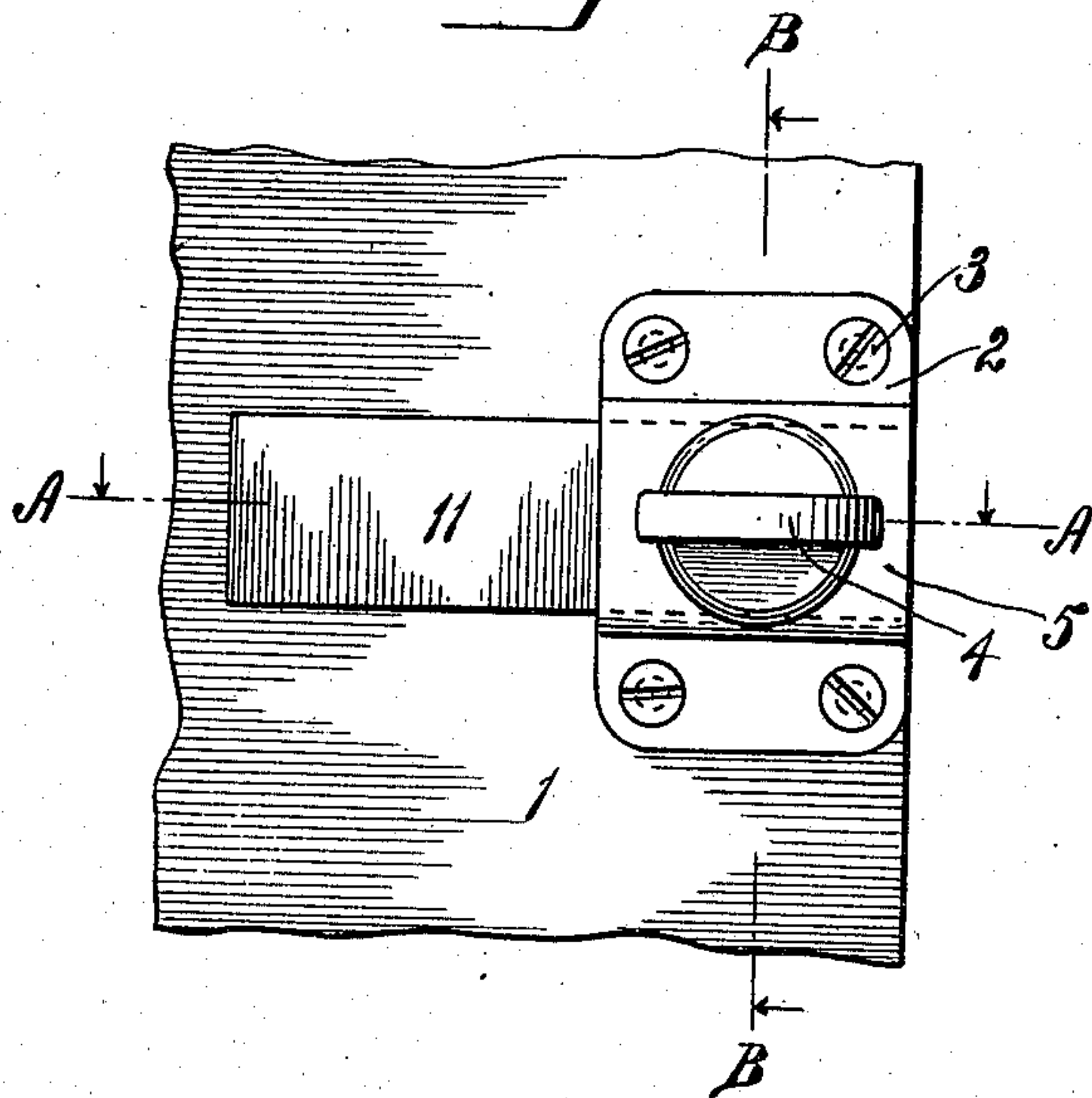
PATENTED MAR. 10, 1908.

F. P. PFLEGHAR.

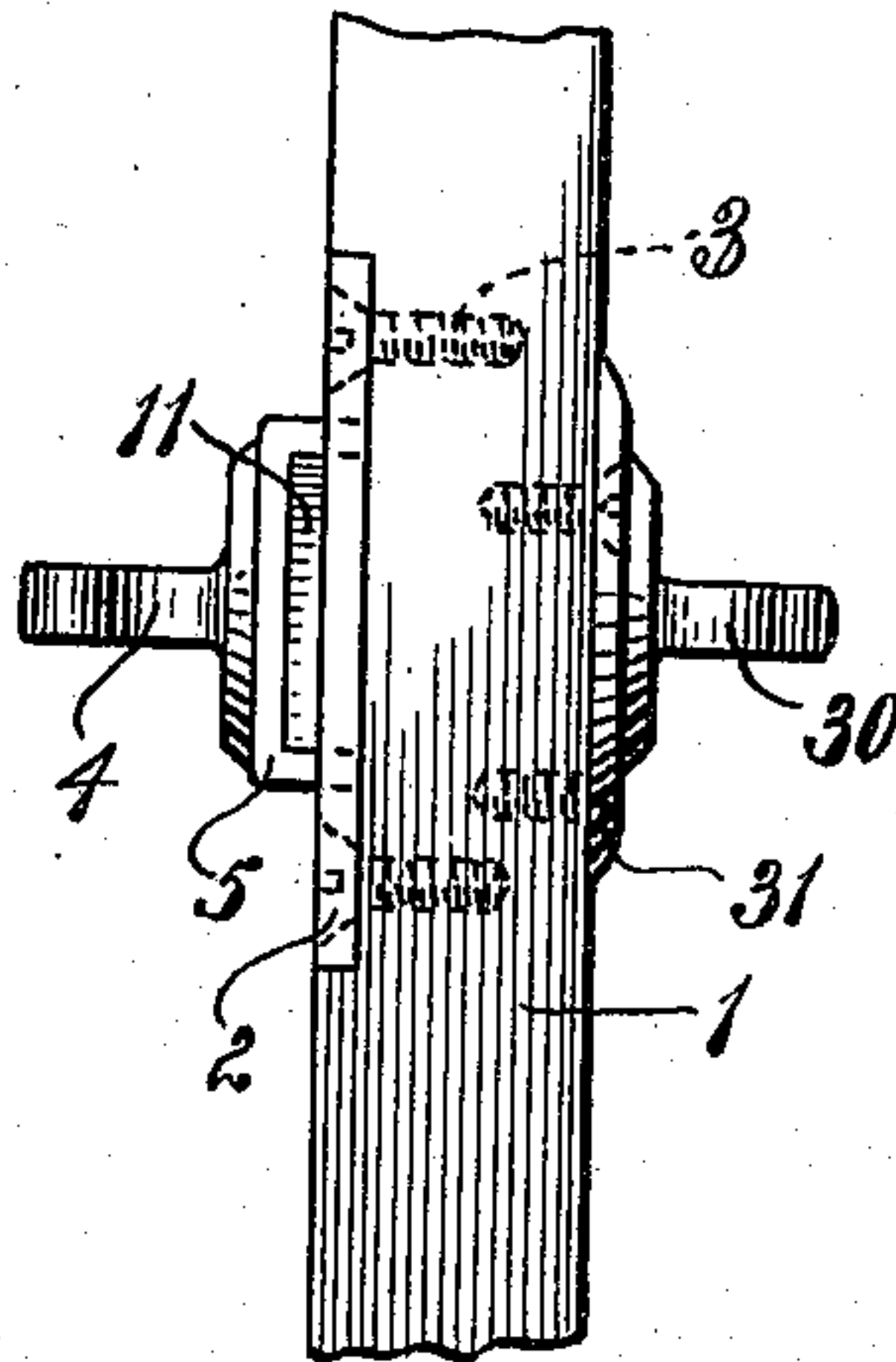
BOLT.

APPLICATION FILED SEPT. 28, 1905.

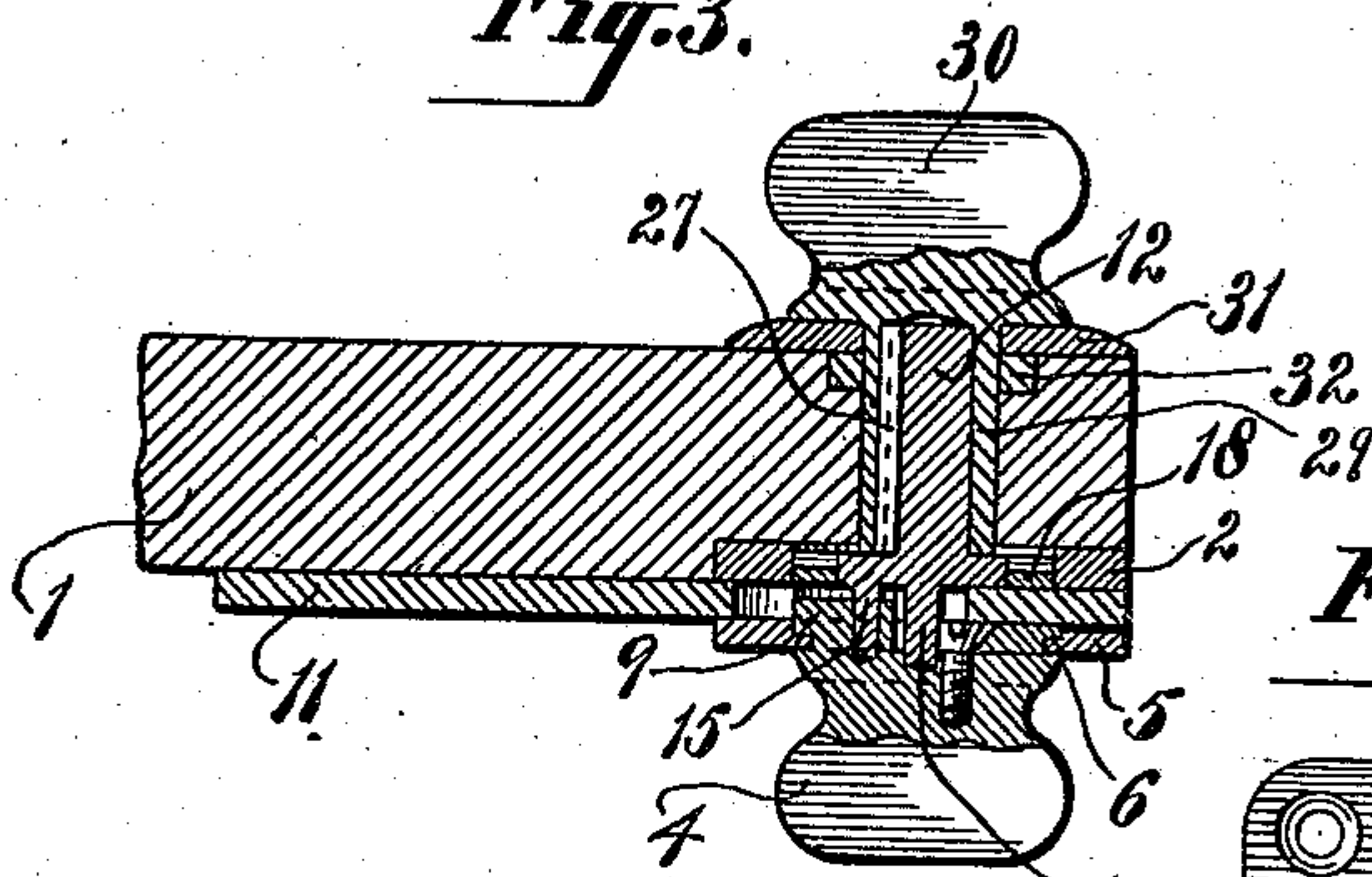
*Fig. 1.*



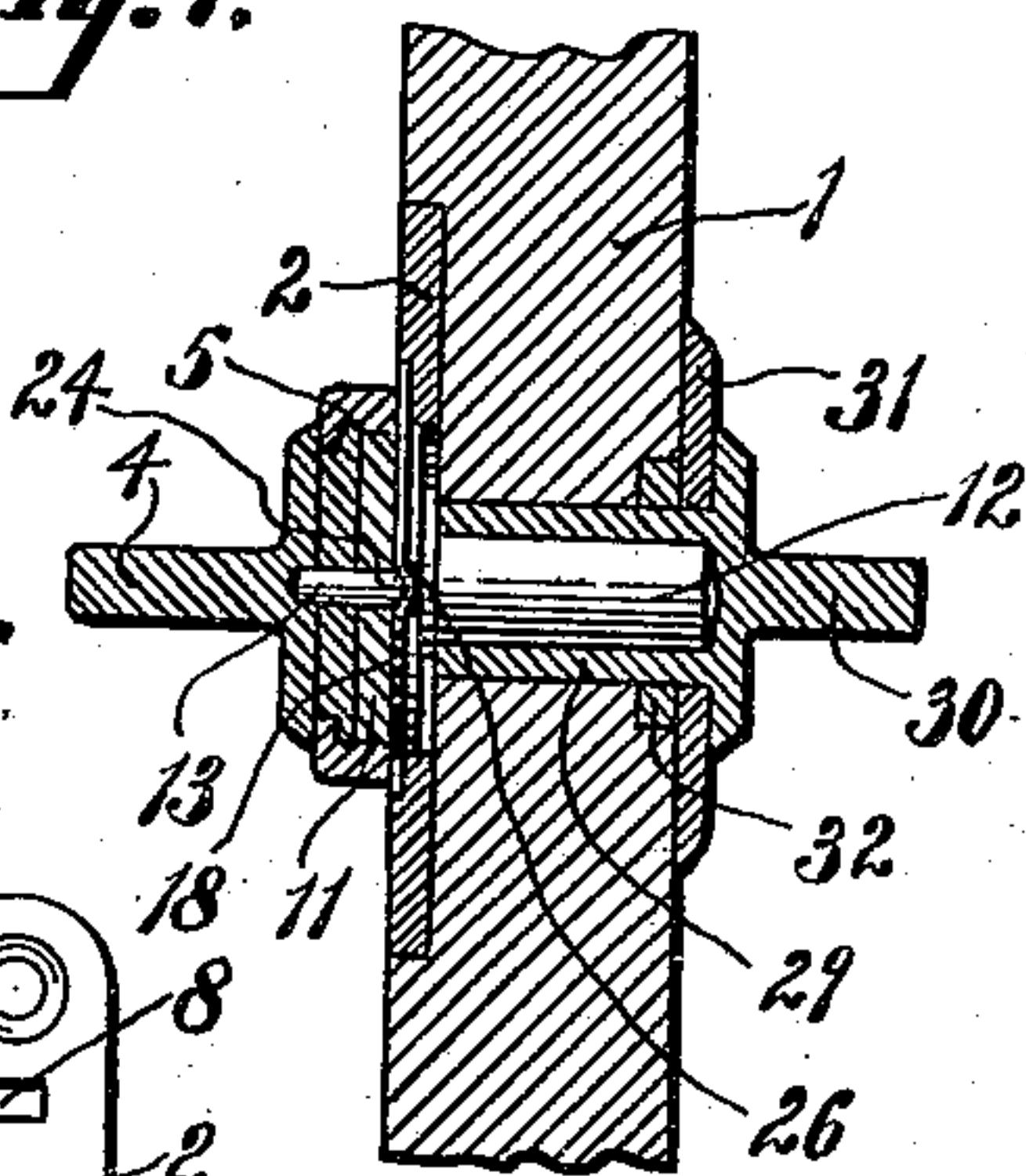
*Fig. 2.*



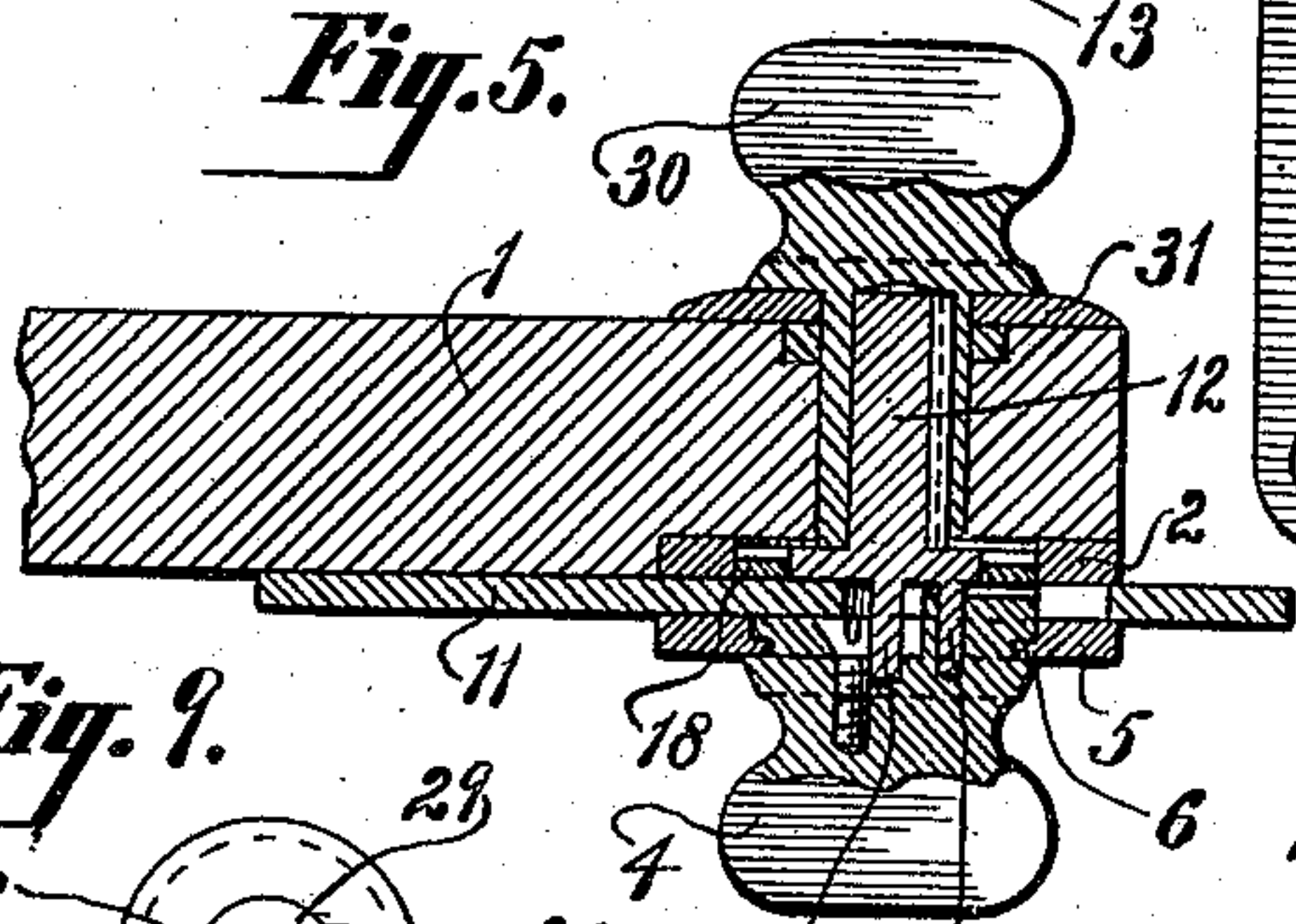
*Fig. 3.*



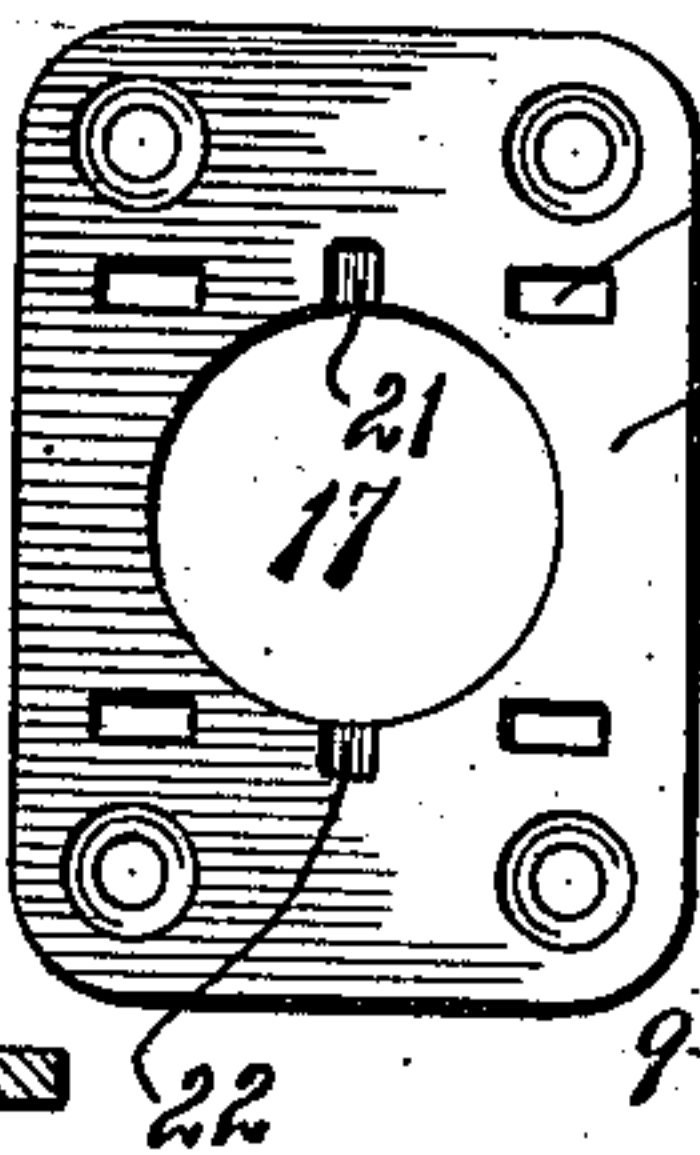
*Fig. 4.*



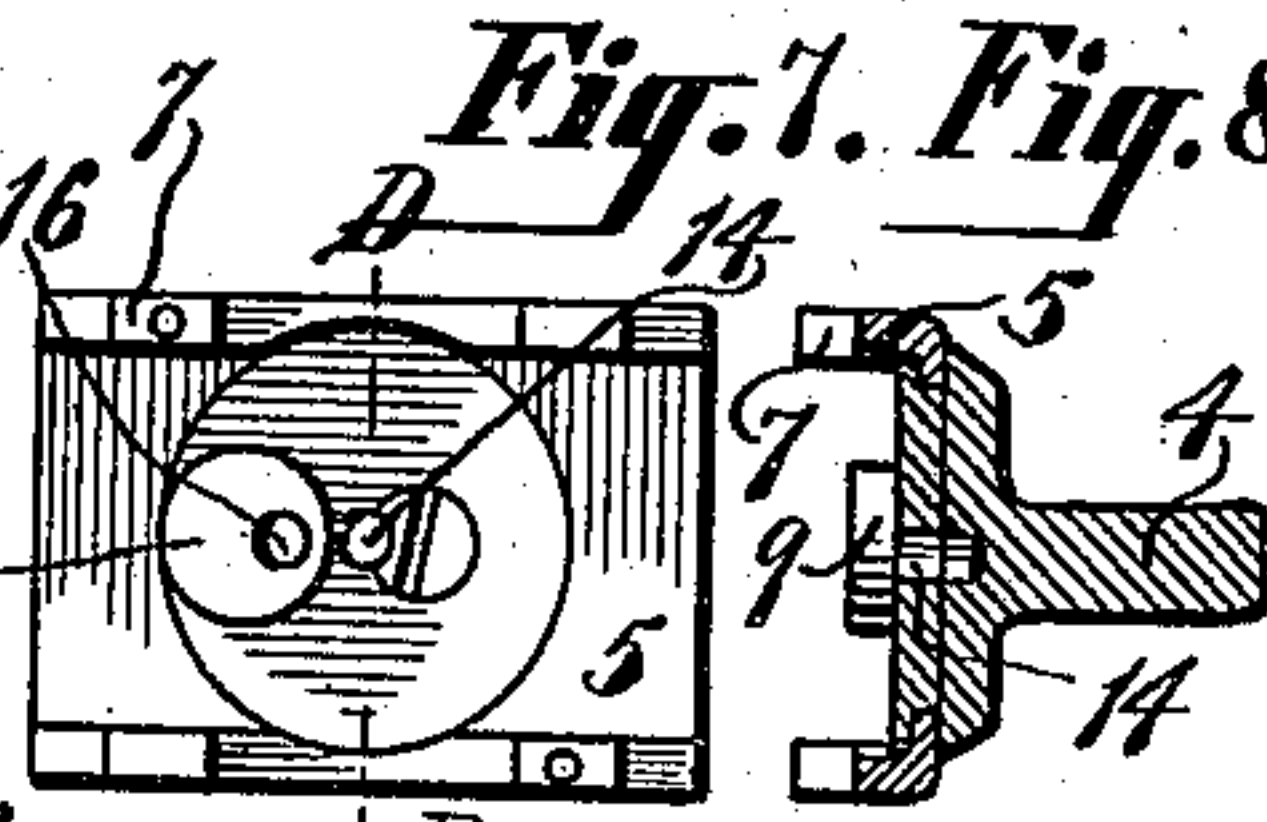
*Fig. 5.*



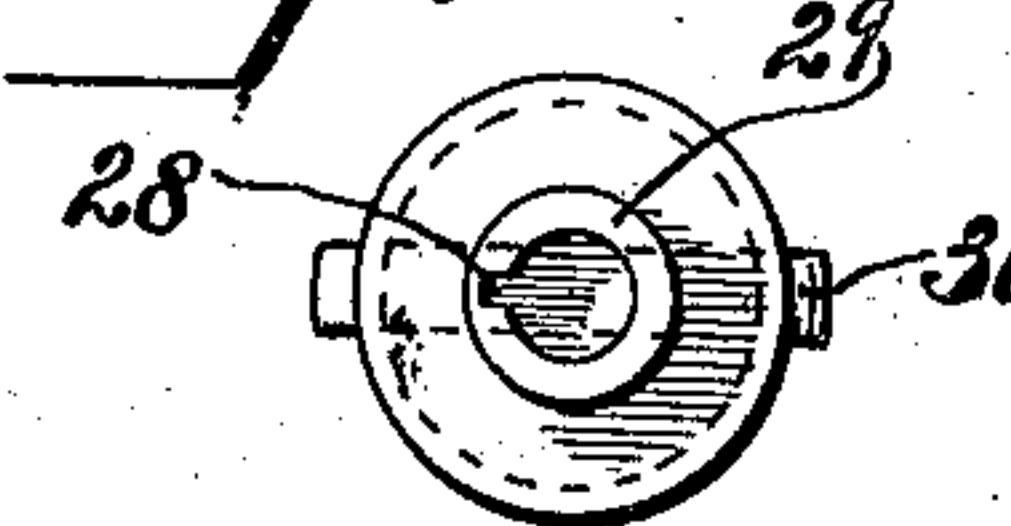
*Fig. 6.*



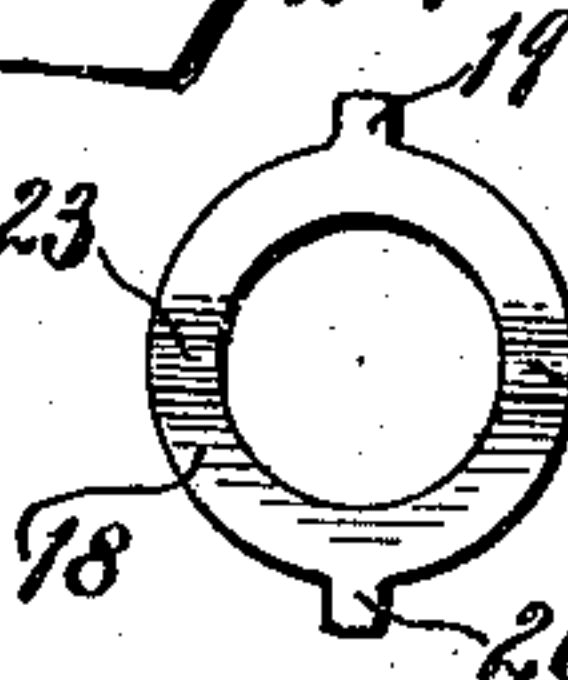
*Fig. 7. Fig. 8.*



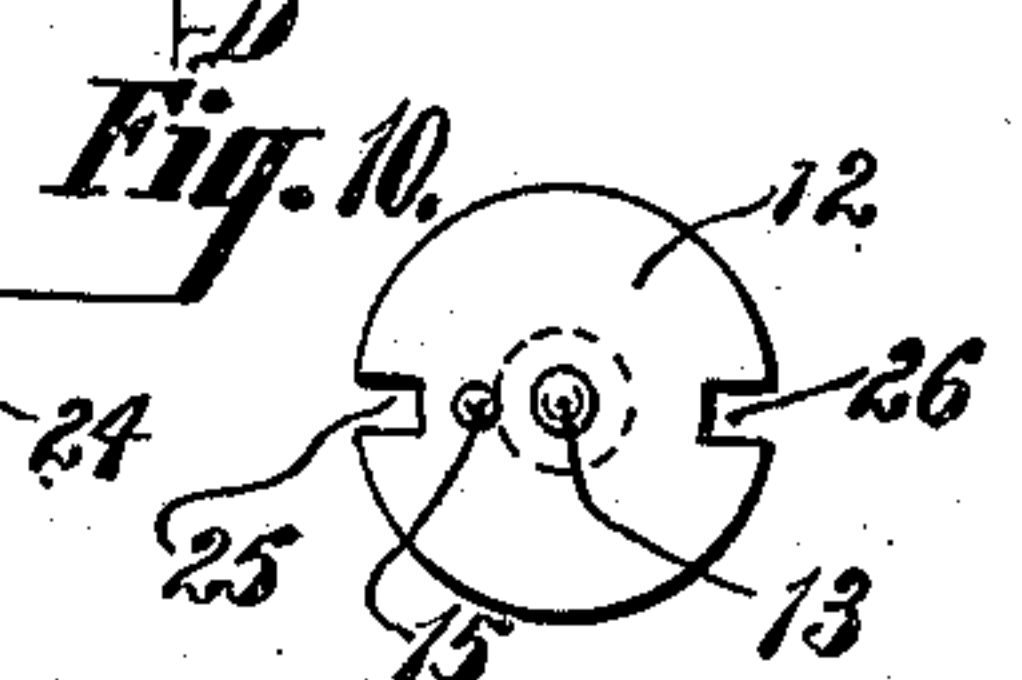
*Fig. 9.*



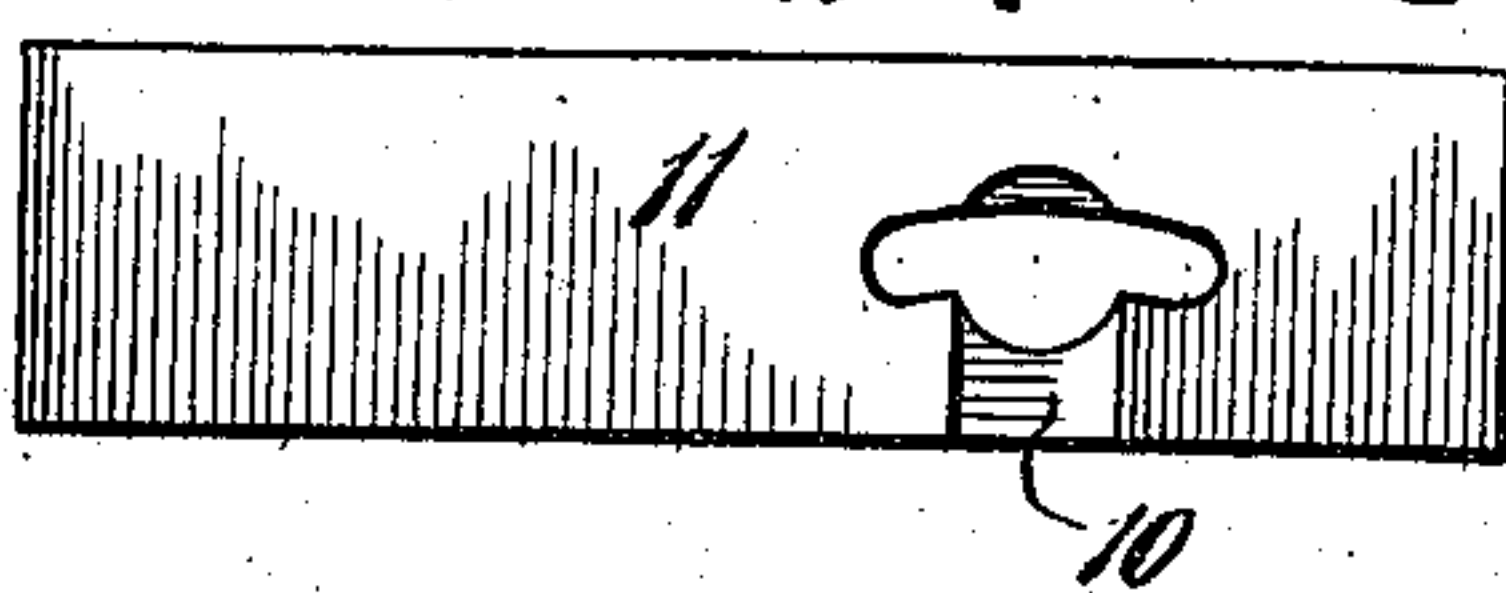
*Fig. 12.*



*Fig. 10.*



*Fig. 11.*



***Unfitness:***

F. G. Hachenberg.  
Neuruphorne.

***Inventor:***

Frank P. Pledge  
By Brown & Howard  
his Attorneys



# UNITED STATES PATENT OFFICE.

FRANK P. PFLEGHAR, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO F. P. PFLEGHAR & SON,  
OF NEW HAVEN, CONNECTICUT, A FIRM.

## BOLT.

No. 881,613.

Specification of Letters Patent.

Patented March 10, 1908.

Application filed September 28, 1905. Serial No. 280,434.

*To all whom it may concern:*

Be it known that I, FRANK P. PFLEGHAR, a citizen of the United States, and resident of New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Bolts, of which the following is a specification.

My invention relates to bolts and more particularly to bolts for use in vehicles such, for example, as automobiles, where it becomes desirable to manipulate the bolt from either the inside of the vehicle or outside as the case may be.

A practical embodiment of my invention is represented in the accompanying drawings in which

Figure 1 is a view in side elevation showing the bolt applied to its support and in its thrown back or open position, Fig. 2 is a view of the same in front end elevation showing its support in edge elevation, Fig. 3 is a horizontal section in the plane of the line A—A of Fig. 1, Fig. 4 is a section in the plane of the line B—B of Fig. 1, Fig. 5 is a section in the plane of the line A—A of Fig. 1, showing the bolt in its locked position, Fig. 6 is a front view in detail of the face plate to which the keeper is attached, Fig. 7 is a view of the under side of the keeper showing the bolt operating disk in position therein, Fig. 8 is a section through the same in the plane of the line D—D of Fig. 7, Fig. 9 is an end view of the opposite bolt operating sleeve and handle, Fig. 10 is an end view of the intermediate connection between the two handles, Fig. 11 is a view of the bolt in side elevation in detail, and Fig. 12 represents an edge and face view of the locking spring.

The part which carries the bolt and from the inner and outer sides of which the bolt is intended to be operated, is denoted by 1. On one side of the part 1, near its front edge, there is located a face plate 2 which is preferably let into the part 1 the thickness of the plate, and this may be secured in position by means of screws, four screws 3 being here shown for securing it in position.

One of the bolt operating handles 4 has its shank which may consist of a short disk, seated in a keeper 5 by means of an under-cut 6 so as to permit the handle 4 to rotate a half revolution to throw the bolt forward and backward. The keeper 5 is secured to the outer side of the face plate 2 conveniently by means of spurs 7 which pass through holes 8

in the plate, the free ends of the spurs 7 being upset to hold the keeper locked to the bolt. The inner face of the shank of the handle 4 is provided with a short circular projection 9 located eccentrically on its face and this projection works in a shallow transverse slot or recess 10 in the bolt 11 to throw the bolt forward and backward as the handle 4 is turned.

In order to bring the bolt under the control of the handle on the opposite side of the part 1, I provide an intermediate spindle 12. This spindle 12 projects through the part 1 and is provided on its end forward of the handle 4, with a central pin 13 which enters a hole 14 centrally in the shank of the handle 4 and with a pin 15 eccentric to the pin 13 which enters a hole in the shank of the handle 4. The hole 16 is here shown as located near the edge of the eccentric projection 9 which operates the bolt.

The face plate 2 is provided with a central opening 17 for the reception of the enlarged inner end of the spindle 12 from which the pins 13 and 15 project and around the spindle 12 and bearing against the bolt 11, there is located a circular spring 18, the said spring as shown in Fig. 12, being provided with a pair of ears 19, 20, diametrically disposed and projecting outwardly from its edge, which ears are intended to seat in recesses 21, 22, at the edge of the opening 17 in the face plate, while noses 23, 24, on the outer face of the spring 18 conveniently formed by bending the spring as shown in Fig. 12, seat in slots 25 and 26 formed on the opposite edges of the enlarged head of the spindle 12 to hold the spindle and hence the bolt against accidental displacement when in its full locked position or full open position. The spindle 12 is provided with a feather 27 extending longitudinally along one side thereof, which feather is received in a groove 28 formed in the wall of the tubular shank 29 of the opposite handle 30. The handle 30 is made fast to and rotates in a face plate 31 conveniently by swaging the collar 32 on to its shank to lock the face plate 31 between the collar and handle and when the escutcheon 31 is secured to the back of the part 1, the handle will be secured in position.

In assembling the parts, the hollow shank 29 of the handle 30 is slid on to the spindle 12, the feather 27 occupying the groove 28 in the shank and thus the two handles are locked together so that when either one is turned,



the shank of the handle 4 with its eccentric 9 will be turned and hence the bolt will be thrown in the one way or the other depending upon the direction in which the handles are turned.

5 This structure admits of throwing the bolt from one side or the other at pleasure while a single spring serves to lock it against unintentional displacement.

10 It will further be observed that the eccentric 9 which operates the bolt is so located that it will be on center with respect to the longitudinal axis of the bolt when the bolt is at the extreme advance or extreme return movement, so that no pressure on the bolt  
15 itself can effect its displacement when in either of these two positions.

It is obvious that changes might be resorted to in the form and arrangement of the several parts without departing from the  
20 spirit and scope of my invention; hence I do not wish to limit myself strictly to the structure herein set forth, but

What I claim as my invention is:

1. The combination with a longitudinally  
25 sliding bolt and a handle provided with a projection eccentrically located thereon for operating the bolt, of a second handle oppositely disposed with respect to the first named handle and connected with the first  
30 named handle for operating the said handle and hence the bolt.

2. The combination with a longitudinally  
35 sliding bolt and a handle provided with a projection eccentrically located thereon for operating the bolt, of an oppositely disposed handle and an intermediate spindle connecting the shanks of the two handles to cause them to operate in unison.

3. The combination with a longitudinally reciprocating bolt and a handle having a pro- 40  
jection eccentrically located thereon for operating the bolt, of an intermediate spindle having a connection with the shank of said handle at a distance from its axis and a second handle having its shank connected with 45  
the spindle at a distance from its axis to rotate the spindle and hence the first named handle and bolt.

4. The combination with a reciprocating bolt and a handle provided with a projection 50  
eccentrically located thereon for operating the bolt, of a spindle provided with a pin projecting from its face in axial alinement with the first named handle and with a second pin projecting from its face at a distance 55  
from the axis thereof and a second handle provided with a shank adapted to receive said spindle and means for locking said shank to the spindle.

5. The combination with a reciprocating 60  
bolt, and a handle provided with a projection eccentrically located thereon for operating the bolt, of a spring housed between the shank of the handle and the bolt support, the said spring and the handle being provided 65  
the one with projections and the other with recesses for frictionally holding the bolt in either its advanced or withdrawn position.

In testimony that I claim the foregoing as my invention, I have signed my name in 70  
presence of two witnesses, this 21st day of Sept., 1905.

FRANK P. PFLEGHAR.

Witnesses:

FRANCES I. MARTIN,  
MAE D. CONATY.