

No. 868,623.

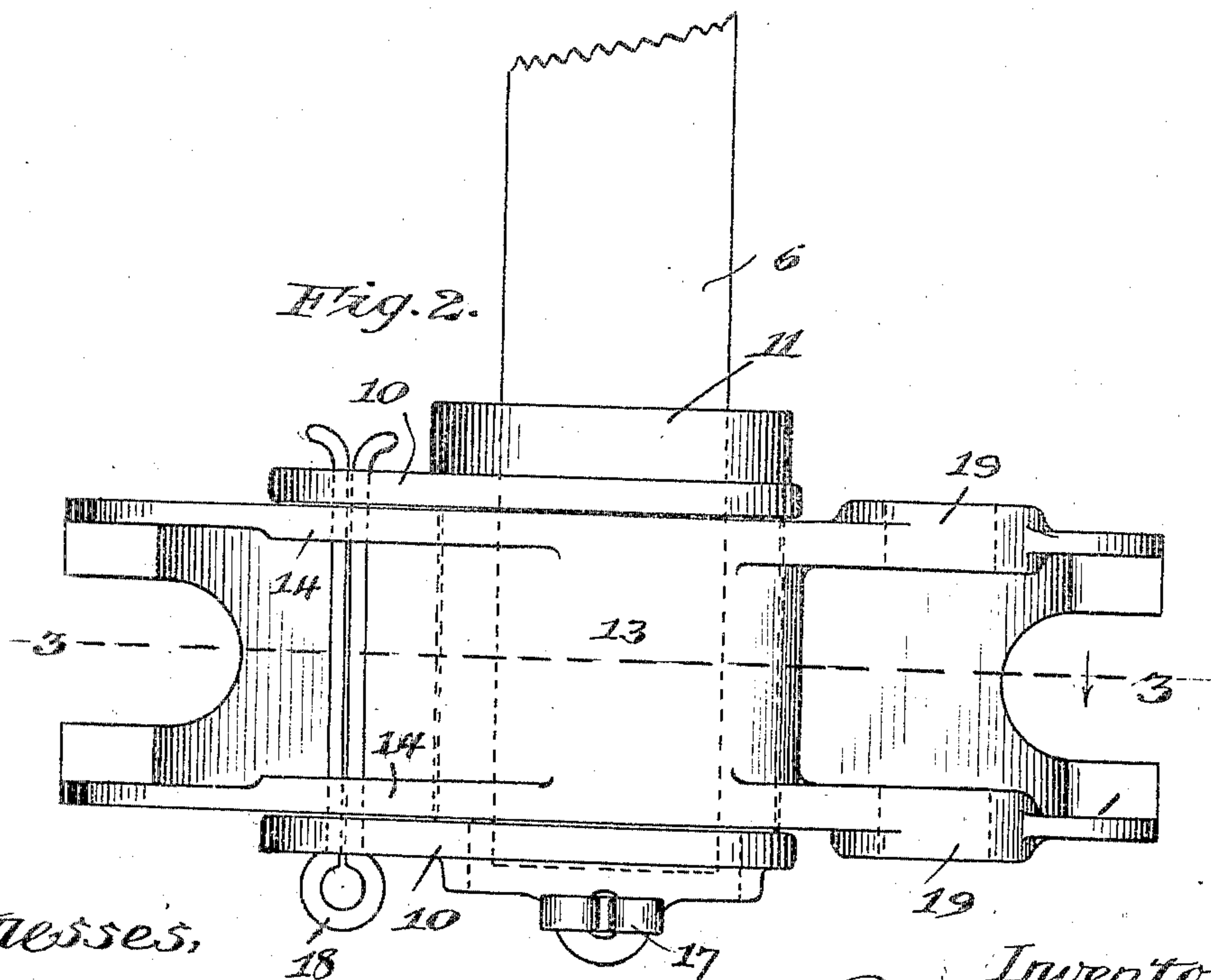
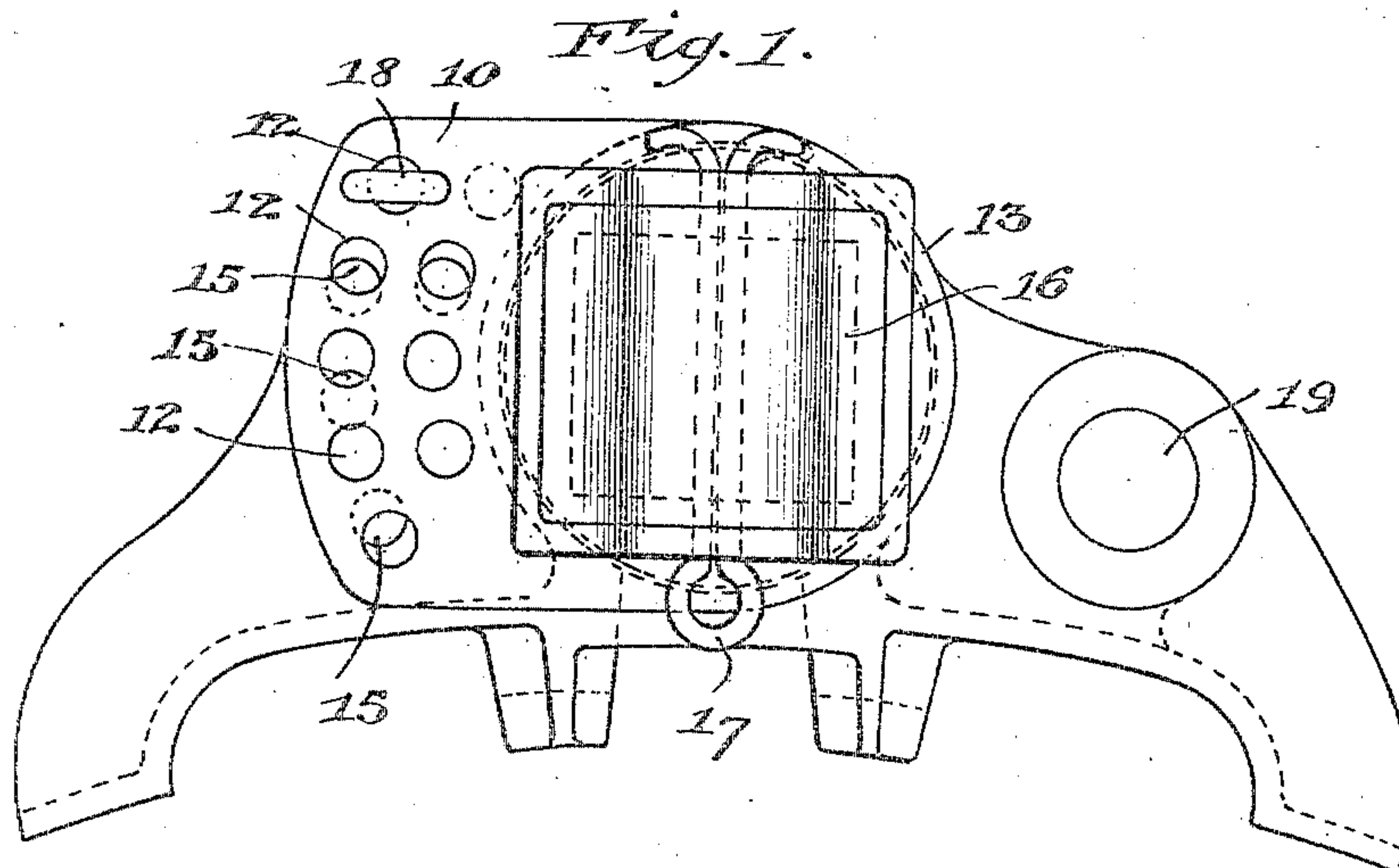
PATENTED OCT. 15, 1907.

C. E. BAUER & F. L. SUSEMIHL.

ADJUSTABLE BRAKE HEAD.

APPLICATION FILED FEB. 4, 1907.

2 SHEETS—SHEET 1.



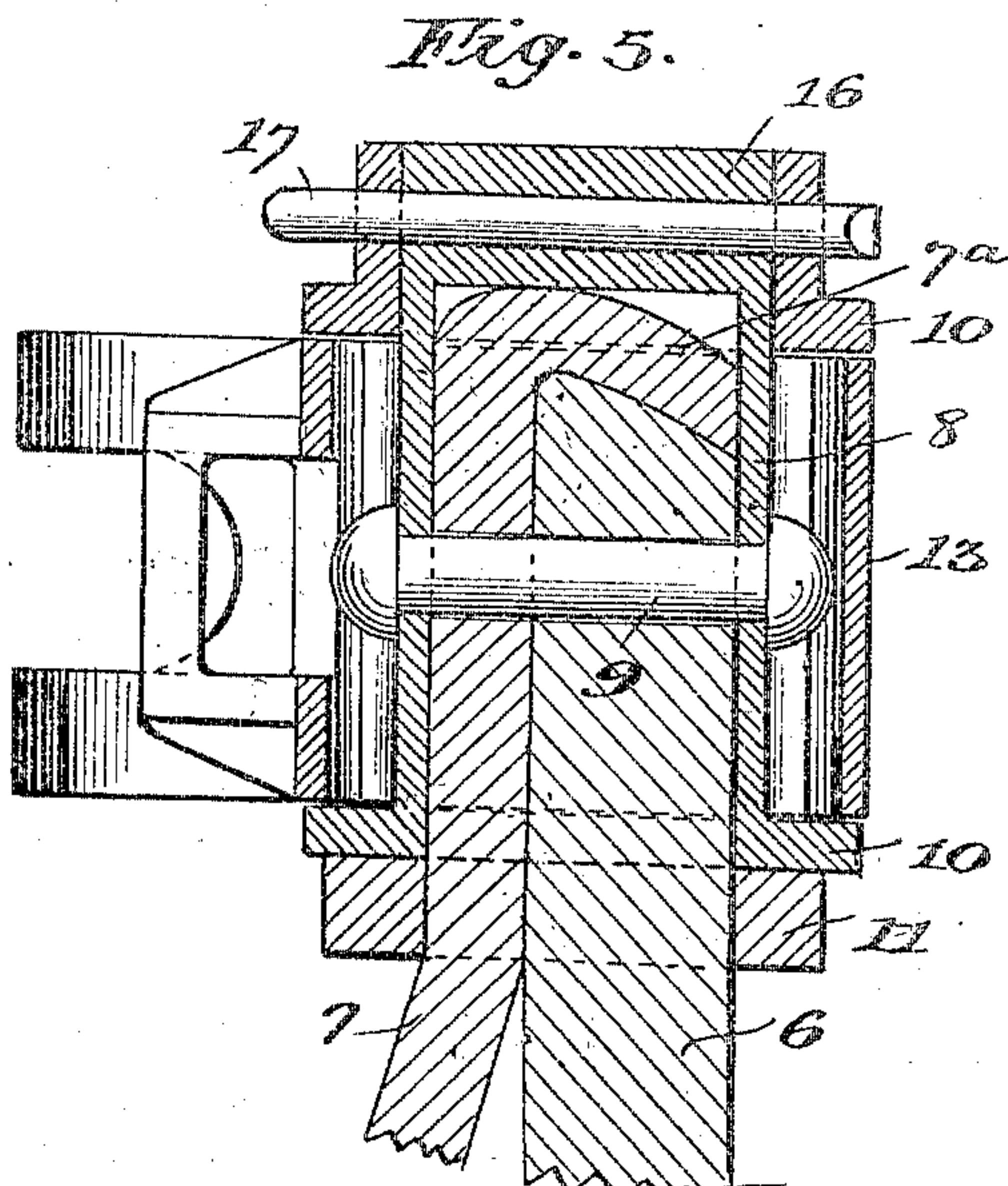
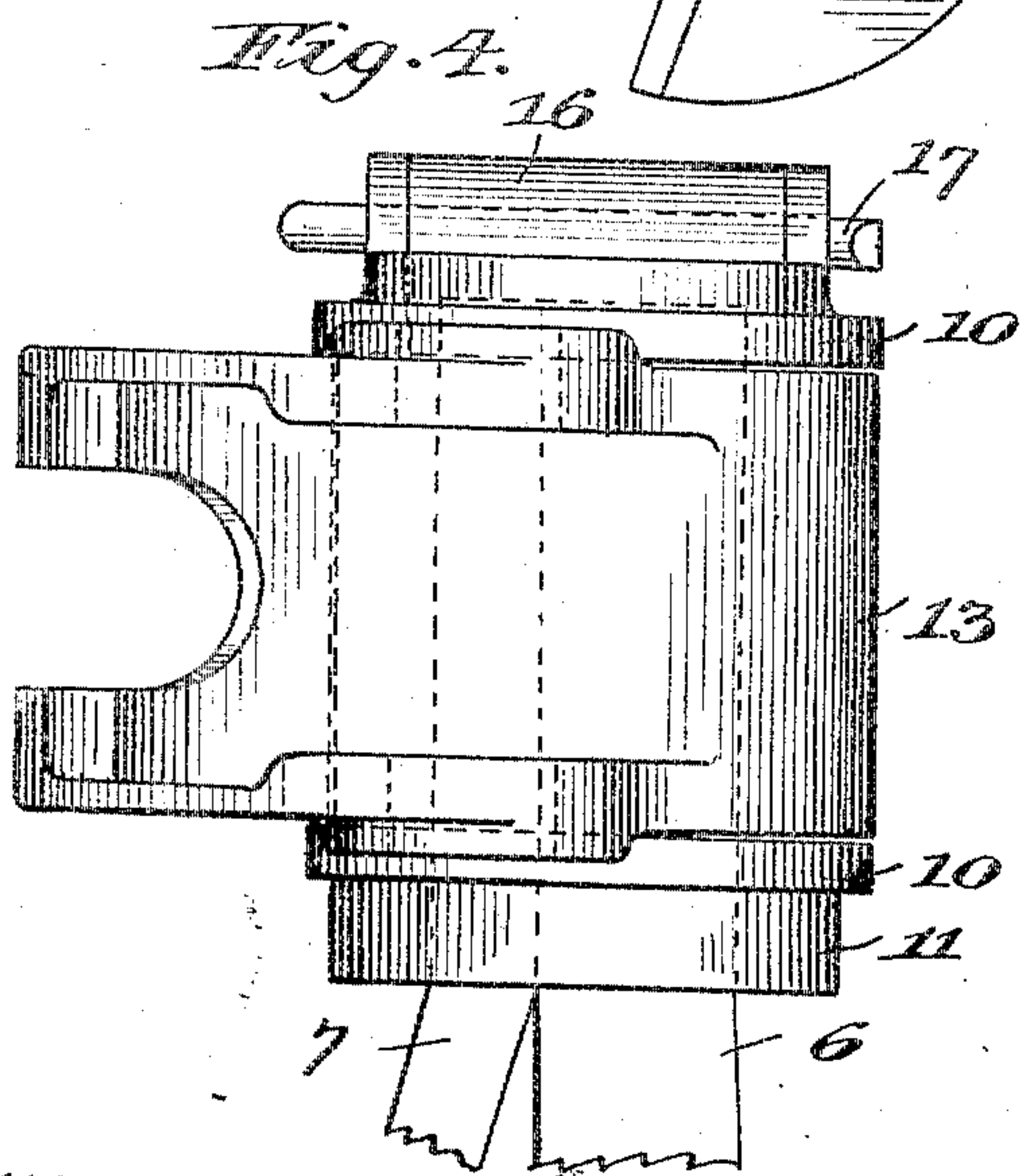
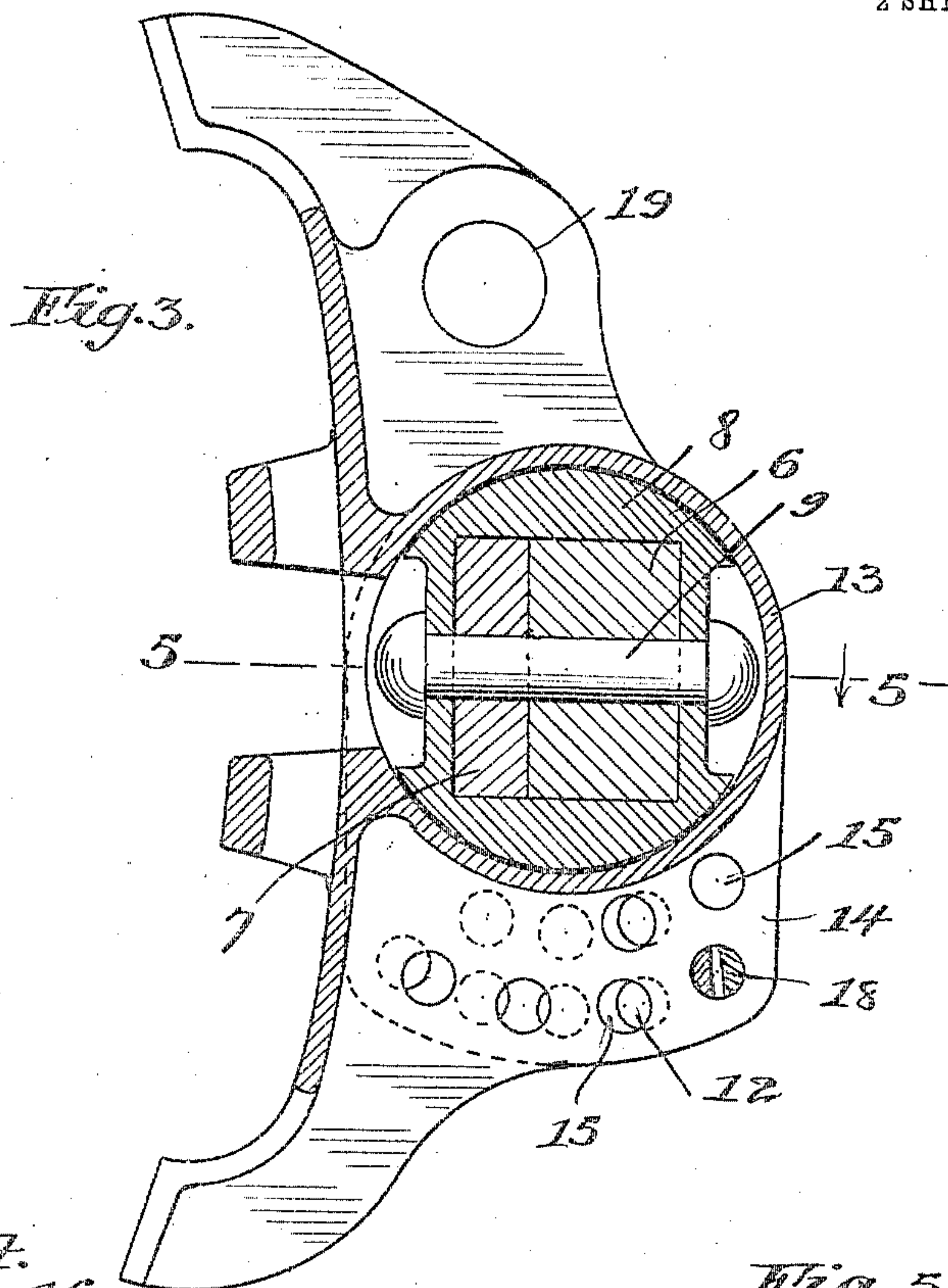
Witnesses,
S. D. Mann,
S. H. Pond.

Inventors,
Carl E. Bauer
Frank L. Susemihl
By *Offield, Towle & Luthier*
Attys.

C. E. BAUER & F. L. SUSEMIHL.
ADJUSTABLE BRAKE HEAD.

APPLICATION FILED FEB. 4, 1907.

2 SHEETS—SHEET 2



Witnesses,
J. E. Mann
E. H. Ford

Inventors
Carl E. Bauer
Frank L. Susemihl
By Offield, Torole & Lathicum
Attys.

UNITED STATES PATENT OFFICE.

CARL E. BAUER AND FRANK L. SUSEMIHL, OF HAMMOND, INDIANA, ASSIGNORS TO AMERICAN STEEL FOUNDRIES, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

ADJUSTABLE BRAKE-HEAD.

No. 868,623.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed February 4, 1907. Serial No. 355,634.

To all whom it may concern:

Be it known that we, CARL E. BAUER and FRANK L. SUSEMIHL, both citizens of the United States, residing at Hammond, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Adjustable Brake-Heads, of which the following is a specification.

This invention relates to brake heads for the brake beams of railway cars, and has reference more particularly to a new and improved means for mounting and securing the head on the end of the brake beam in a manner to effect comparatively fine angular adjustments of the head relatively to the beam so as to cause the brake shoe to evenly engage the tread of the wheel, whereby to effect an application of the wearing surface of the shoe to the wheel throughout the entire extent of the face of the shoe when the brakes are applied, and secure the uniform and even wearing away of the shoe.

Our invention, in one practical form in which the same may be embodied, is illustrated in the accompanying drawings, in which,—

Figure 1 is a side elevational view of the brake head shown as applied to the end of the brake beam; Fig. 2 is a top plan view of the parts shown in Fig. 1; Fig. 3 is a longitudinal section through the brake head, showing the end of the brake beam in cross-section on the line 3—3 of Fig. 2; Fig. 4 is an end view of the brake head as mounted on the end of the brake beam; and Fig. 5 is a sectional elevation on the line 5—5 of Fig. 3.

Referring to the drawings, 6 may designate the brake beam proper and 7 the truss-bar of the usual type of trussed brake beam, wherein the ends of the beam proper and truss-bar are brought together and united by rivets or bolts, with the end of the truss-bar bent over the end of the beam proper, as indicated at 7^a in Fig. 5.

8 designates a bearing member having a squared bore adapted to snugly fit the squared end of the brake beam, being preferably secured thereto as by a rivet 9. The inner end of the bearing member has an integral laterally projecting wing 10 that abuts against a collar 11 shrunk on the brake beam, the projecting portion of said wing being provided with a series of holes or apertures indicated at 12. The brake head is provided with a central circular transverse hub 13 that is journaled on the rounded bearing surface of the bearing member 8; and said brake head is further provided with a pair of rigid laterally projecting wings 14 lying substantially in the planes of the sides of the head. The wings 14 of the head are each provided with a series of registering apertures 15 differently grouped relatively to the series of holes 12 in the wing 10. On the squared projecting end 16 (Fig. 5) of the bearing member 8 is snugly fitted an outer wing 10 provided with a series of apertures 12 registering with the corresponding apertures

in the inner wing 10 that is rigid with the brake-beam; and said outer wing may be conveniently secured in place in a removable manner by a cotter-pin 17 passed through registering holes in the hub of the wing and the end portions 16 of the bearing member. It will thus be seen that we provide on the end of the brake beam and lying adjacent to the two sides of the brake head a pair of parallel laterally projecting wings 10 having a series of registering apertures; and we also provide on the back of the head, rigid and preferably cast integral therewith, a corresponding pair of wings 14 provided with registering apertures that are differently grouped or arranged relatively to the apertures of the wings 10, so that by slight angular adjustments of the head on its bearing one or more pair of registering holes of the wings 14 is brought into registration with one or more pair of registering holes in the wings 10; so that, by inserting a cotter-pin 18 through said registering holes the head is rigidly secured relatively to the beam in any angular position of adjustment suitable to effect a proper and correct bearing of the brake shoe upon the wheel. The grouping of the respective series of holes carried by the wings 10 and 14 is somewhat upon the principle of the Vernier scale, which secures the maximum number of possible adjustments of the head within the outside limits of angular movement which the brake-head may have in service.

19 indicates the usual transverse bearing in the upper side of the head designed to receive the usual pin or bolt (not shown) of the hanger; and it will be readily understood by those skilled in the art that the angular adjustment of the head on the beam depends principally upon the height at which the brake head is supported relatively to the wheel.

It will thus be seen that the device of our invention provides a simple, easily manipulated, and finely adjustable means for mounting and securing a brake head upon a brake beam with capacity for angular adjustment for the purpose as described.

Minor variations and modifications of the structure shown and described will readily suggest themselves to those skilled in the art, and hence we do not limit the invention to the precise mechanism disclosed, except to the extent indicated in specific claims.

We claim:

1. The combination with a brake-beam having a bearing on its end, of a brake-head rotatably mounted on said bearing, adjacent laterally projecting wings carried by said brake-beam and brake-head, respectively, and means for rigidly uniting said wings at various positions of relative angular adjustment, substantially as described.

2. The combination with a brake-beam having a bearing on its end, of a brake-head rotatably mounted on said bearing, adjacent laterally projecting wings carried by said brake-beam and brake-head, respectively, said wings being provided with differently grouped series of holes, and a pin adapted to be passed through registering holes

100

105

110

said wings at various positions of relative angular adjustment of the latter, substantially as described.

3. The combination with a brake-beam having a bearing on its end, of a brake-head rotatably mounted on said bearing, said brake-head having a pair of rigid, laterally projecting apertured wings substantially in the planes of the sides of the head, and a cooperating pair of laterally projecting wings rigid with said brake-beam and lying alongside said wings of the head, said brake-beam wings having registering apertures differently arranged relatively to the apertures of the wings of the head, and a pin adapted to be passed through registering holes in said pairs of wings at various positions of angular adjustment of the head, substantially as described.

4. The combination with a brake-beam, of a collar fast thereon, a bearing member secured on the end of the beam and having a laterally projecting wing abutting against

said collar, a brake-head rotatably mounted on said bearing member and having one or more laterally projecting wings, and a wing detachably secured to the projecting end of said bearing member opposite the end of the brake-beam, all of said wings lying side by side and the wings of said bearing member and head having differently grouped series of holes, respectively, and a pin adapted to be passed through registering holes in all of said wings whereby the head may be secured at various angularly adjusted positions on the brake-beam, substantially as described.

CARL E. BAUER.
FRANK L. SUSEMIHL.

Witnesses:

SAMUEL N. POND,
MATTIE B. BLISS.