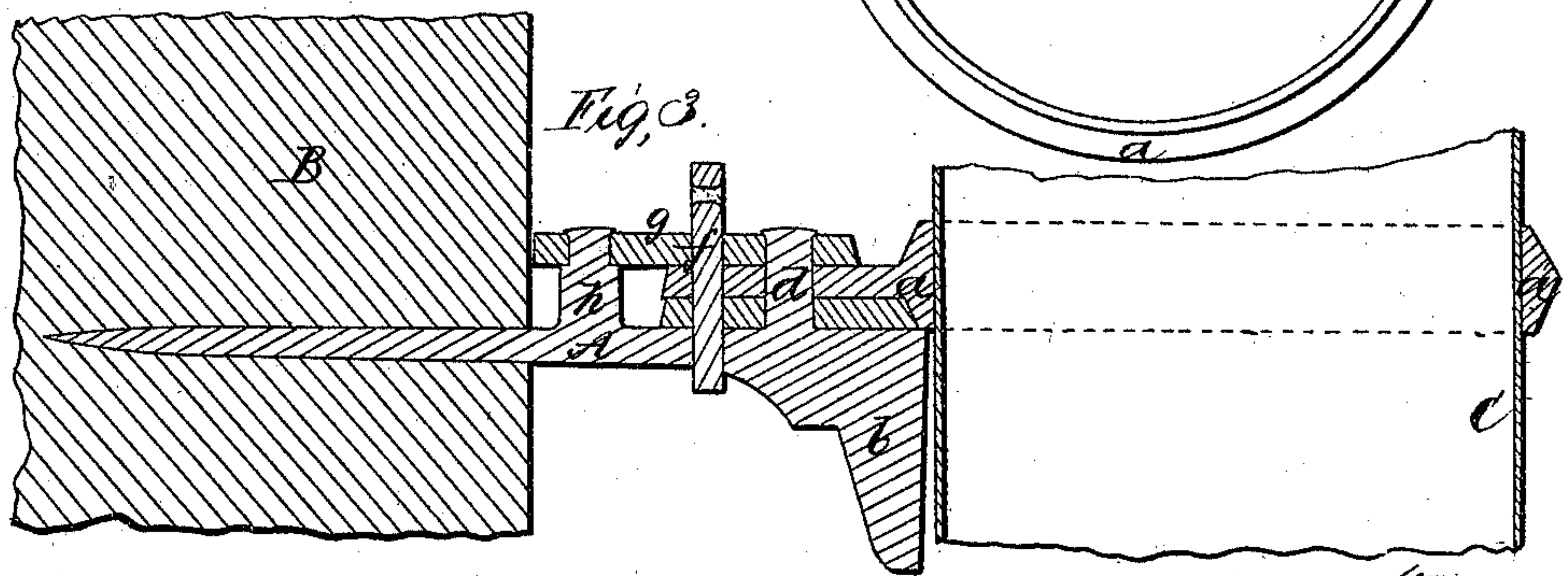
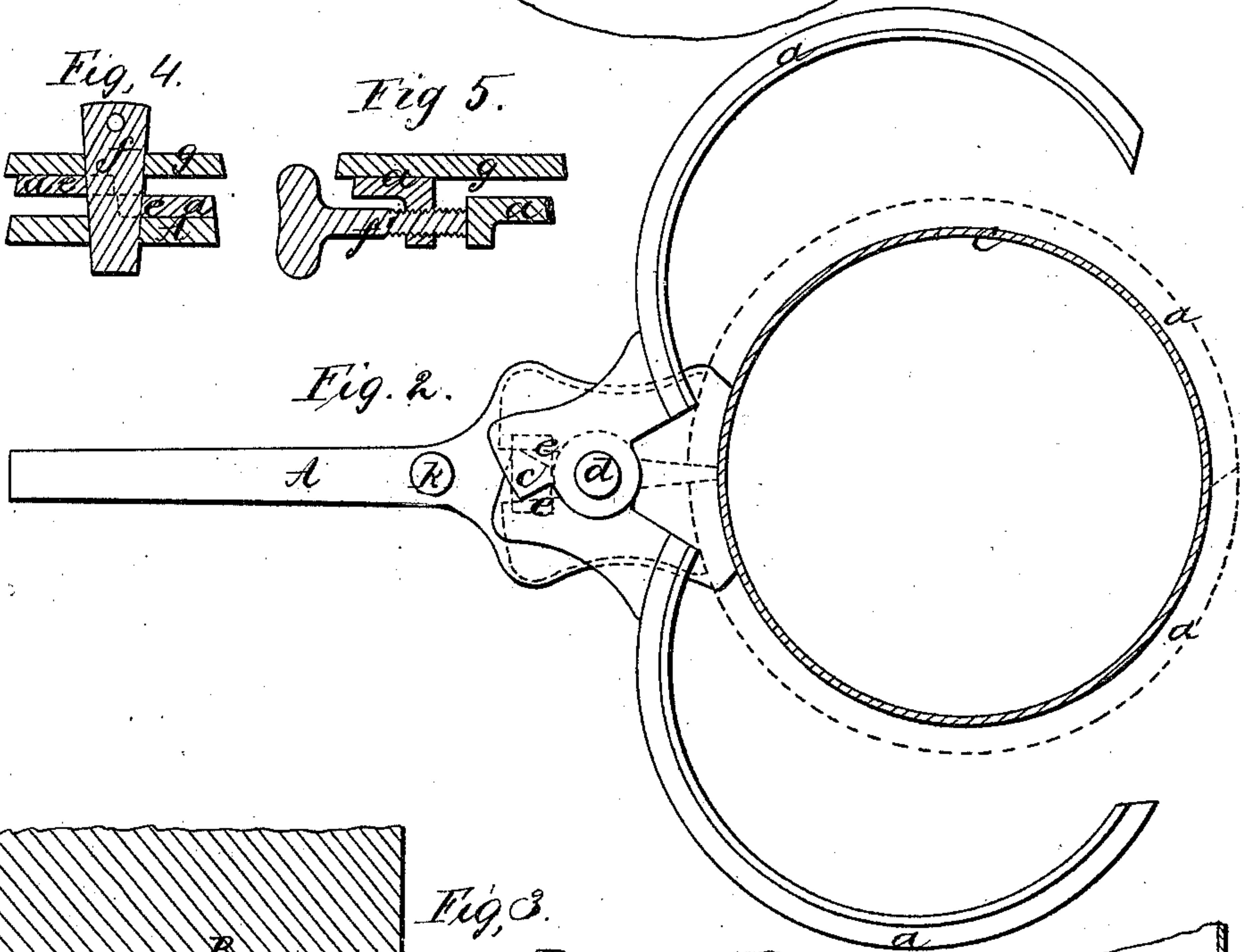
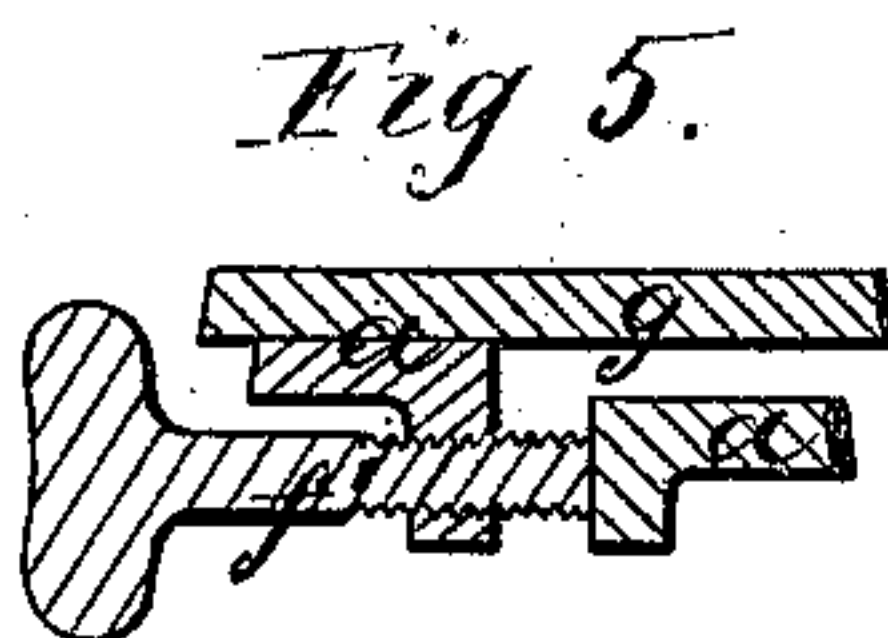
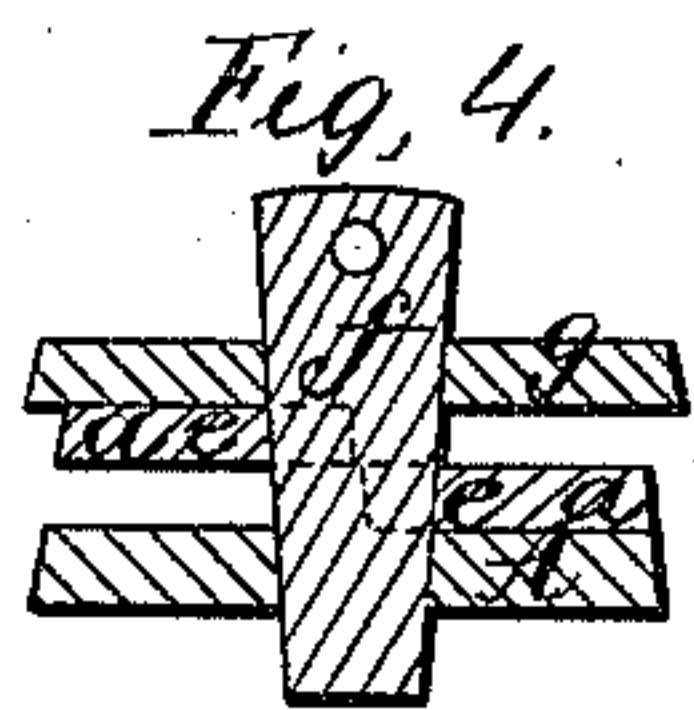
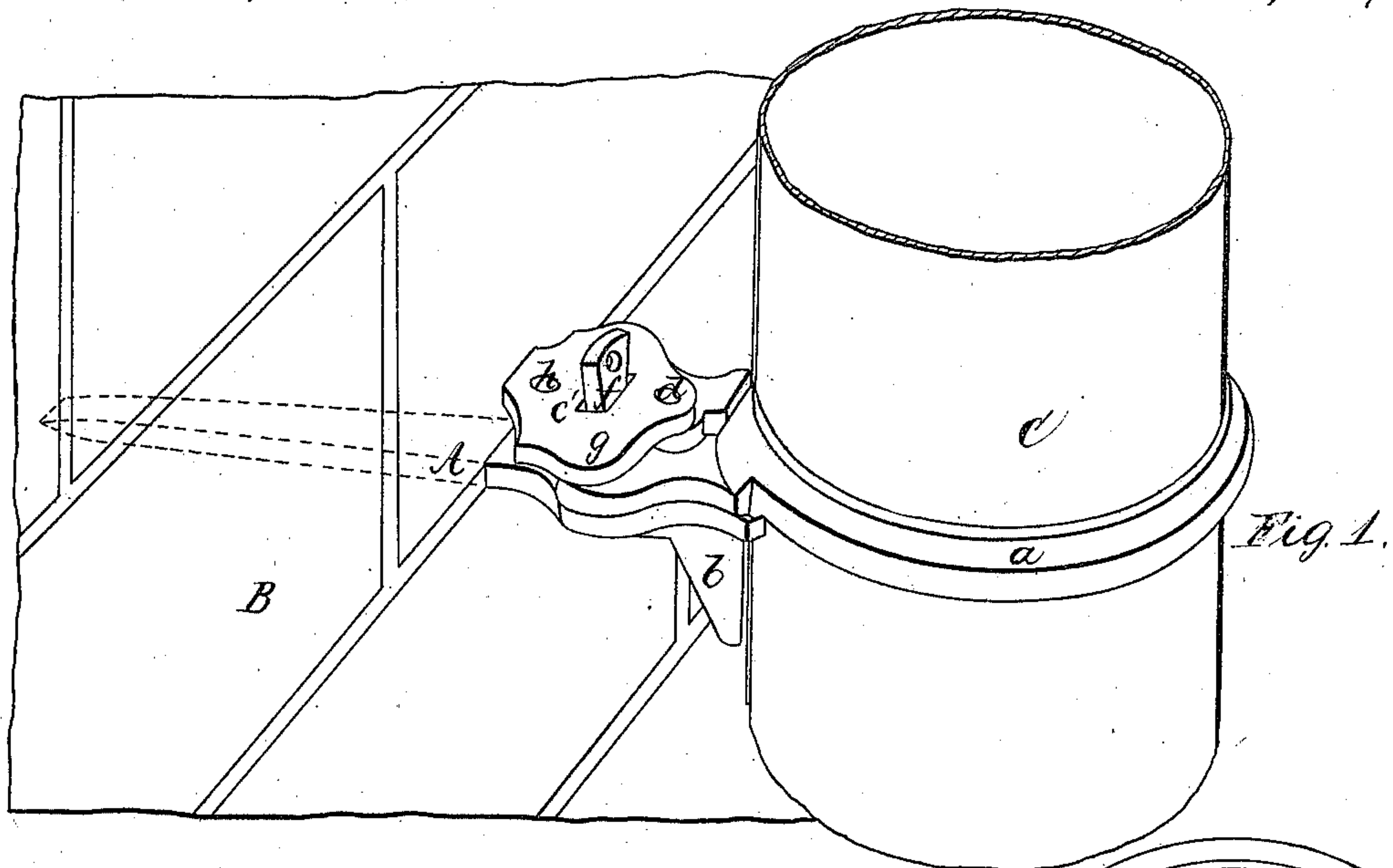


P. Gantz.

Bracket for Eaves Troughs.

N^o 97, 289.

Patented Nov. 30, 1869.



Witnesses,
H. S. Buckby
Alex. Selkirk

Inventor,
Peter Gantz

United States Patent Office.

PETER GANTZ, OF ALBANY, NEW YORK, ASSIGNOR TO HIMSELF AND MARTIN FRYER, OF SAME PLACE.

Letters Patent No. 97,289, dated November 30, 1869.

IMPROVED BRACKET FOR CONDUCTORS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, PETER GANTZ, of the city and county of Albany, State of New York, have invented certain new and useful Improvements in Brackets for Conductor-Pipes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the invention.

Figure 2 is a vertical view of the same.

Figure 3 is a longitudinal section.

Figure 4 is a cross-section through red line in fig. 3.

Figure 5 is a cross-section of the same, showing a set-screw as a substitute for the wedging-key.

The nature of my invention consists in hinging one or both clamping-arms of a bracket to a spike, (to be driven into the side of a building,) and securing the said clamping-arms firmly around the conductor-pipe by means of a wedging-key or a set-screw, placed back of the pivot or pivots on which one or both of the said clamping-arms swings; also, a binding-piece, which, with the shoulder of the spike, will hold firmly all the several pieces together.

When thus constructed, the bracket may receive a conductor-pipe of a little larger or smaller diameter than the size supposed to be, and will firmly hold the said pipe, though the diameters may be slightly varied as is often the case.

By this bracket, the conductor-pipe can be readily placed and secured in position, and held at a distance from the side of a building, as all conductor-pipes should be held.

To enable others skilled in the art to make and use my invention, I will proceed to describe it in reference to the drawings, and the letters of reference marked thereon, the same letters indicating like parts.

A represents the bracket-spike, which is to be driven into the building B, and which is to hold the clamping-arms *a a*, intended to clasp the conductor-pipe C.

The bracket-spike A is made of any suitable metal, (cast malleable iron preferred,) and is furnished with a head, *b*, figs. 1 and 3, on which the spike is to be struck when being driven in its place. The said spike is also furnished with a shoulder having a sufficient width to admit having a square hole, *c*, (shown by dotted lines in fig. 2,) made into it, without weakening the same.

Cast to the spike is also a pivot, *d*, figs. 1, 2, and 3, which pivot is to receive the head of the clamping-arms *a a*, which arms are free to swing on the said pivot, *d*, as shown in fig. 2, and can be opened out to receive the conductor-pipe C, and closed (as shown by red lines) around the said pipe.

Two notches *e e*, fig. 2, are made in the inner edges of the heels of the clamping-arms, back of the pivot *d*, having an aggregate width, shown by red lines, fig. 2, equal to receive the wedging-key *f*, figs. 1 and 4.

A binding-piece, *g*, made of any suitable form, is placed over the heels of the arms *a a*, and riveted down to the pivot *d*, on which the said arms *a* swing.

The said piece *g*, with the shoulder of the spike A, holds the said arms firmly between and prevents them from heeling up or down.

The said piece is also further supported and secured by being riveted to the standard *h*, as shown in figs. 1 and 3, which standard starts up from the shoulder of the spike.

A square hole, *c'*, is made into the said binding-piece *g*, directly over the square hole *c* in the shoulder of the spike, and receives the wedging-key *f*.

To operate with this invention, the spike A is driven in its place in the building B.

The wedging-key *f* is drawn from its place when the clamping-arms *a a* may be opened, as shown in fig. 2.

When the conductor-pipe C is placed between the arms *a*, the said arms are thrown together, as shown by red lines in fig. 2, and are secured in position by the wedging-key *f*, which is inserted in its place and driven tightly therein, as shown in figs. 1, 3, and 4, and when thus placed and driven, the sides of the wedging-key will press against the sides of the notches *e e*, made in the heels of the clamping-arms *a a*, back of the pivot, and will throw them out, while the said clamping-arms will be thrown together, and will hug tightly the conductor-pipe C, between.

The wedging-key *f* may have its edges furnished with such inclines as will affect, more or less, the clamping-arms, so that the said clamping-arms may be made to hug closely pipes of slightly varying diameters, as they are apt to be made varying from the intended size, being either plump or scant.

It would not substantially alter the working of the several parts of my invention, if one of the clamping-arms were made stiff with the spike A, while one only should be permitted to swing on the pivot *d*; or, instead of both arms swinging on one pivot, as shown, they could be made to swing, each on separate and distinct pivots placed on each side of the centre of the spike.

If preferred, the key *f* could be dispensed with, and, as a substitute for the same, a set-screw, *f'*, working in a lug made on the heel of one of the clamping-arms, and against a lug made on the heel of the other, as shown in fig. 5, could be used, which would effect the same results, although not so well preferred as the key, as the liability to rust would inconvenience its ready working of the screw if used.

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

1. In a bracket for conductor-pipes, the clasping-arms *a a*, pivoted to the spike *A*, substantially as and for the purpose set forth.

2. The binding-piece *g*, provided with the hole *c'*, and secured in the manner substantially as and for the purpose set forth.

3. In combination with the heels of the clasping-arms *a a*, the wedging-key *f*, holes *c* and *c'*, substantially as and for the purpose set forth.

PETER GANTZ.

Witnesses:

W. S. BUCKBEE,

ALEX. SELKIRK.