

No. 728,947.

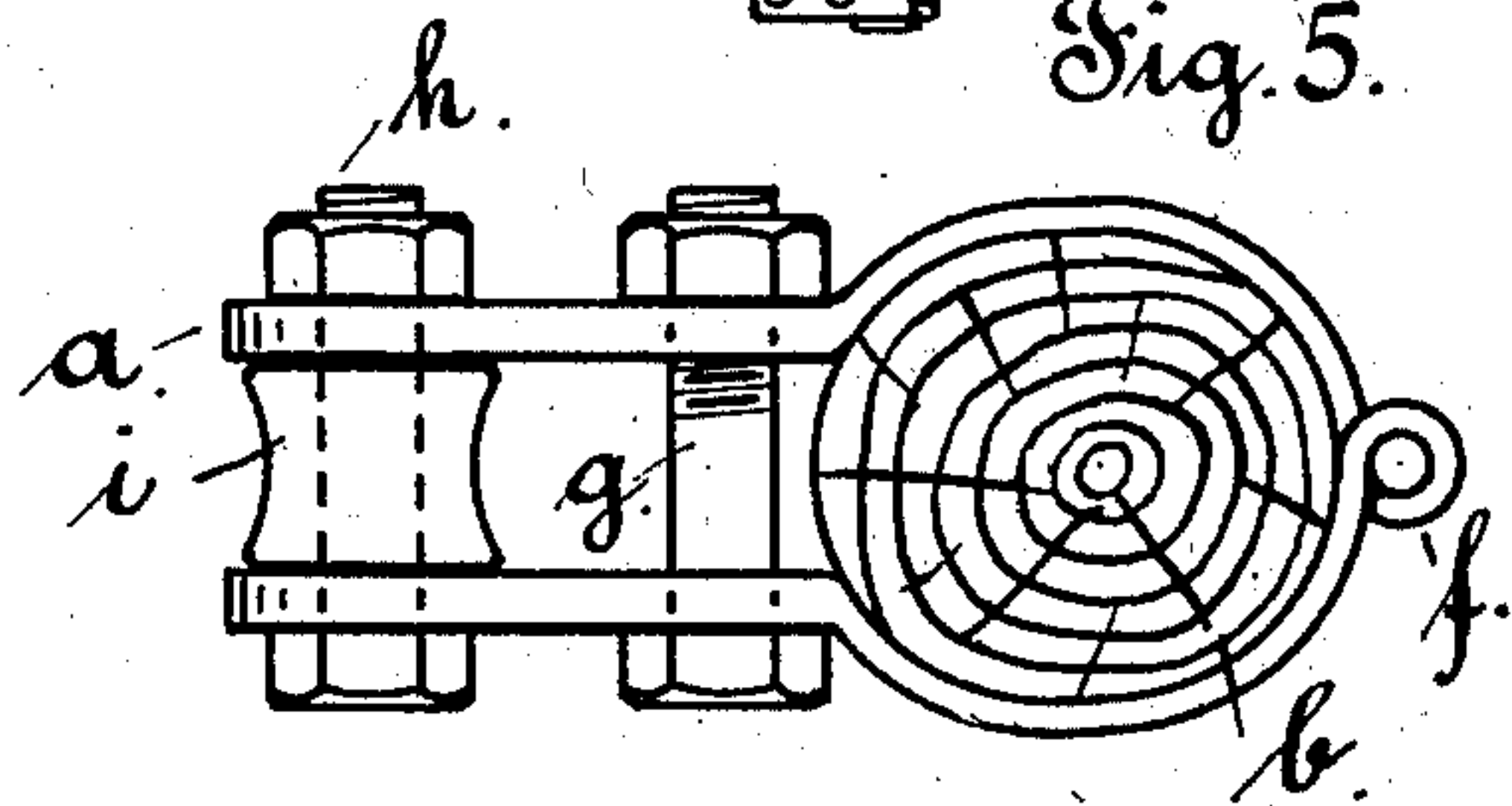
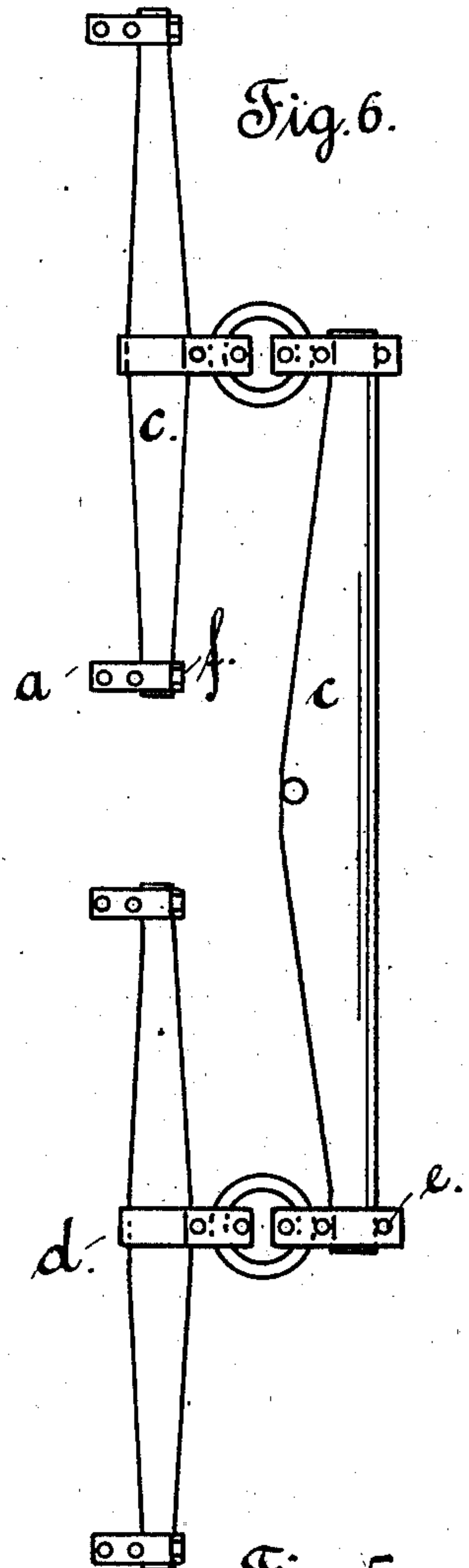
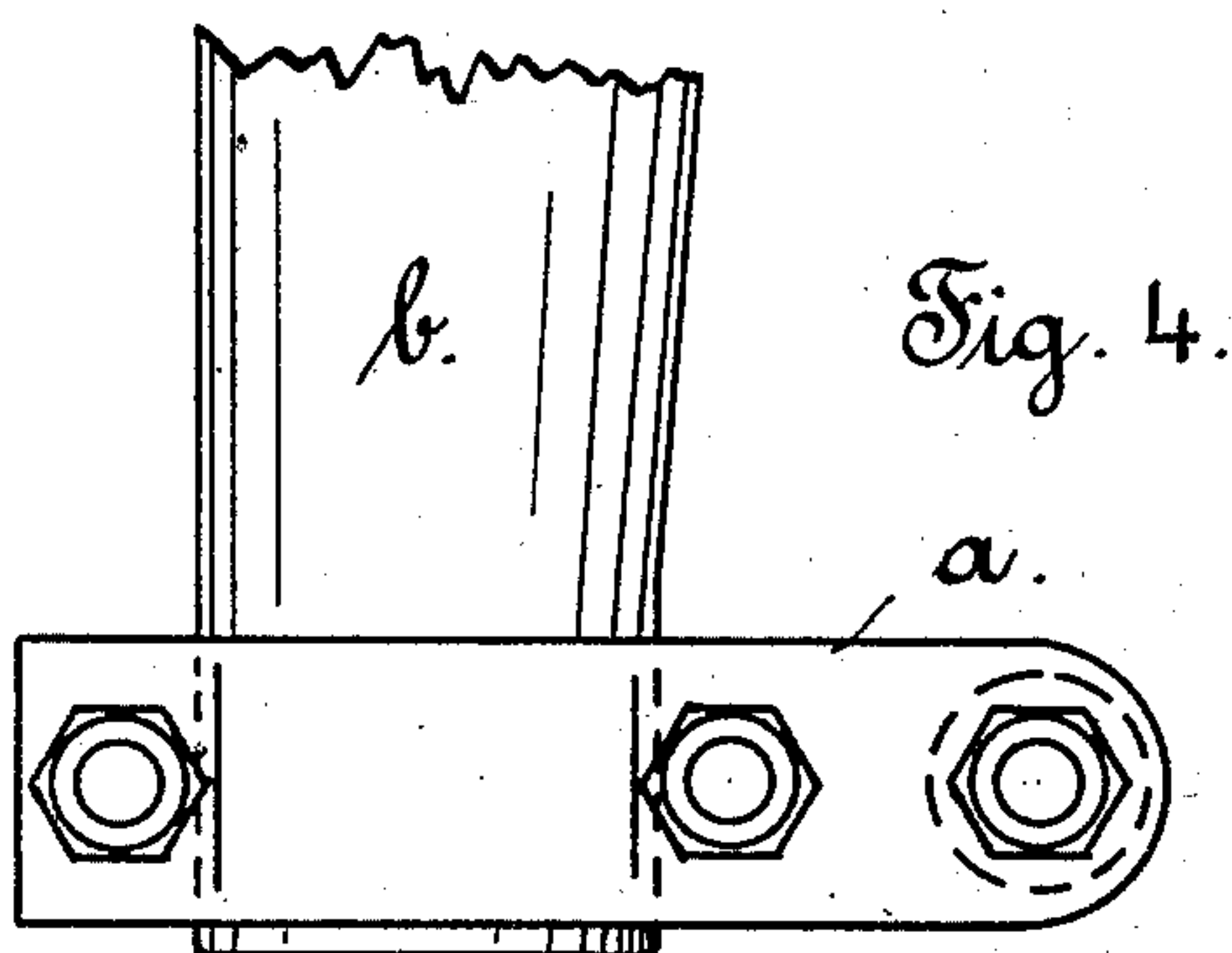
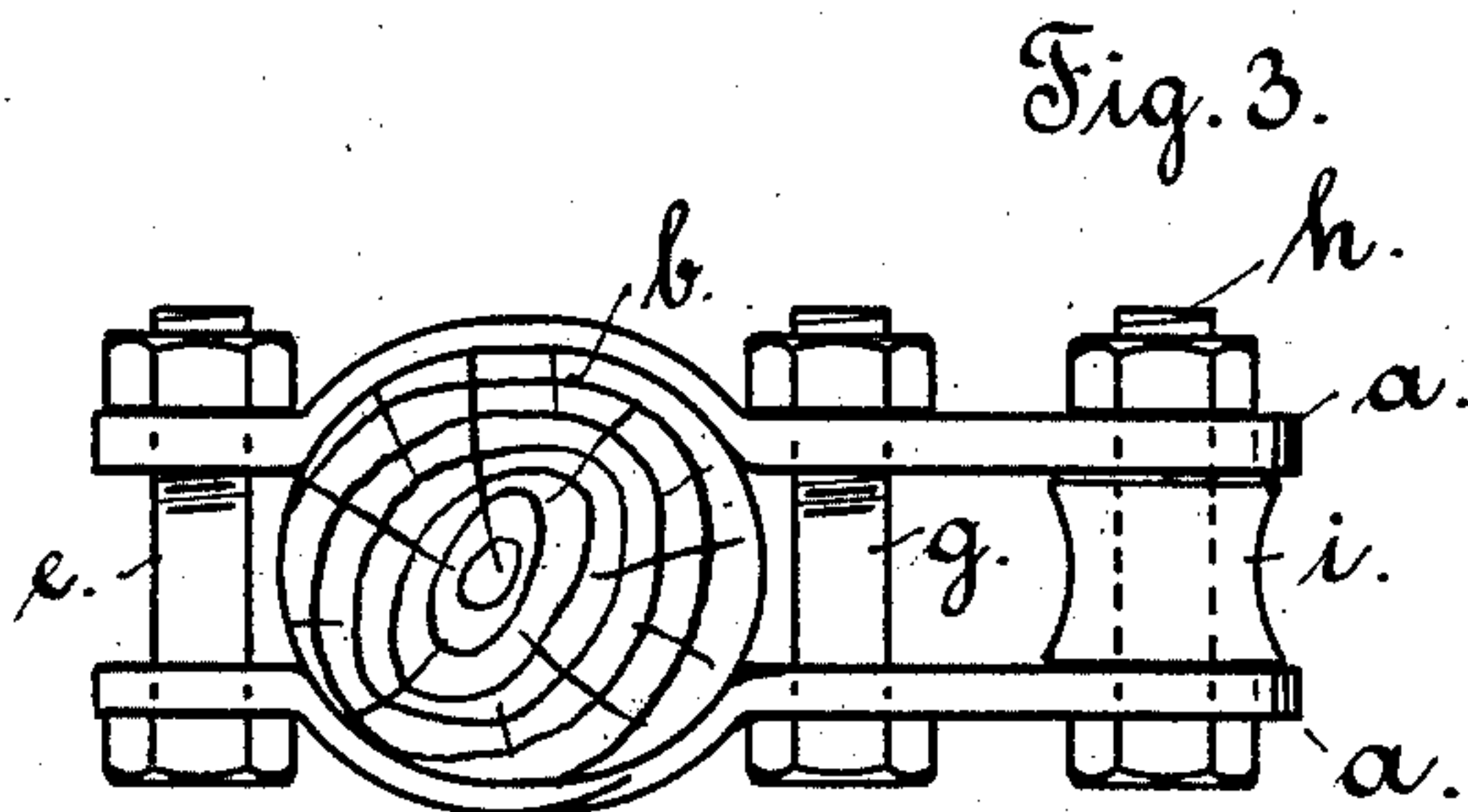
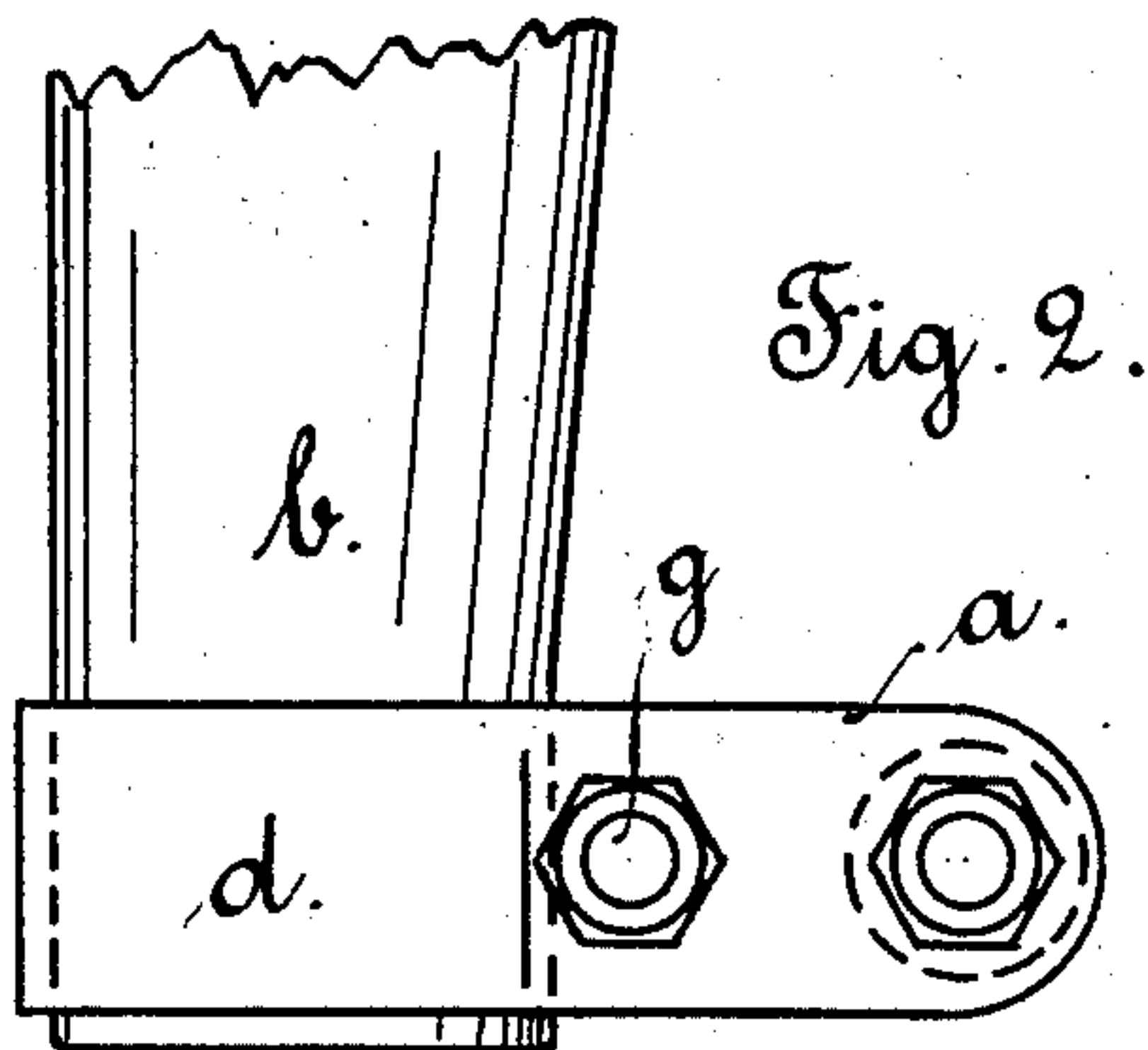
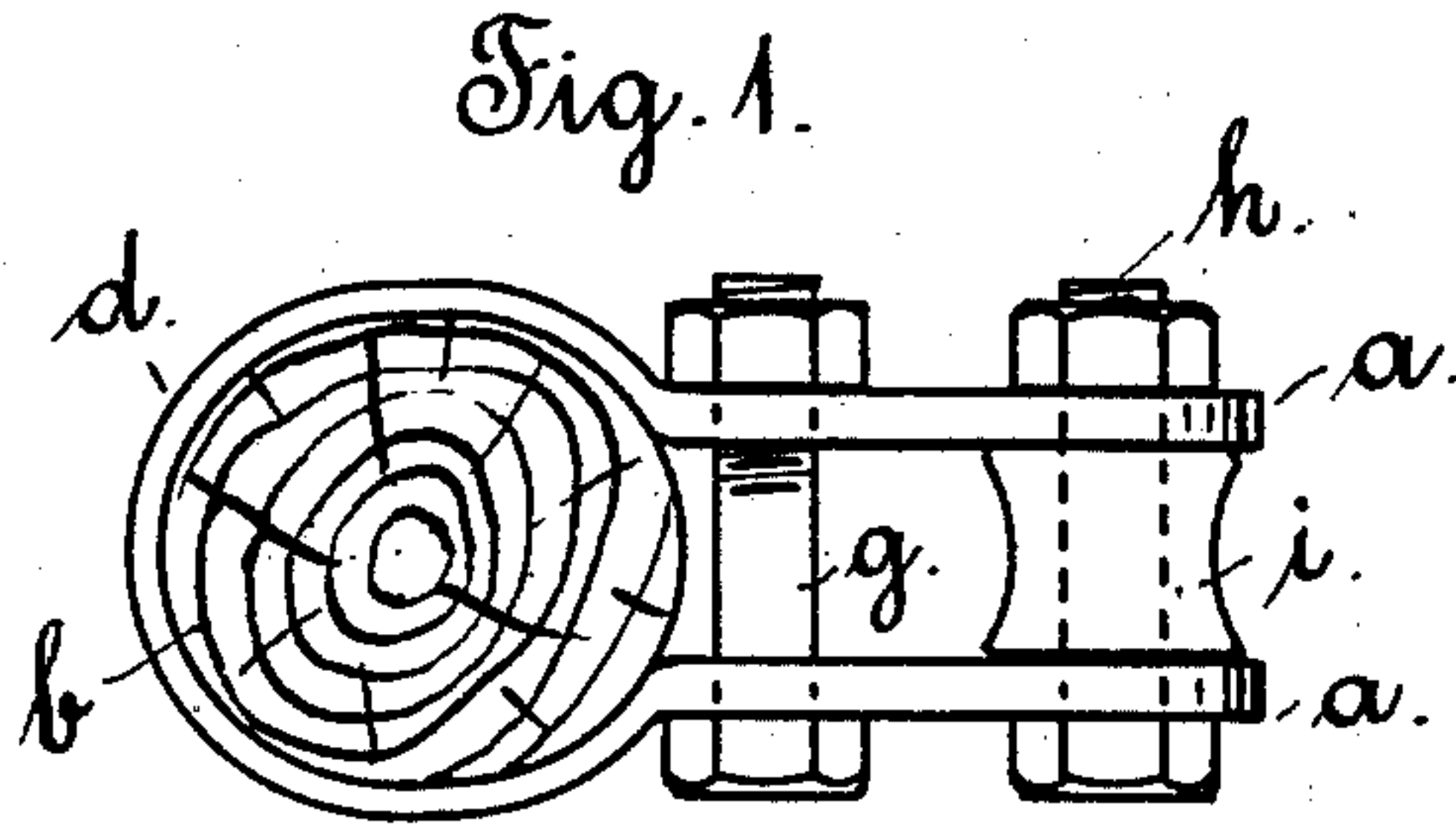
PATENTED MAY 26, 1903.

O. LORENZ.

SWINGLETREE CLASP.

APPLICATION FILED NOV. 11, 1902.

NO MODEL.



Witnesses:
Adolf Holländer
Karl Schuck.

Inventor:
Otto Lorenz
by Ernst Peters
his atty.

UNITED STATES PATENT OFFICE.

OTTO LORENZ, OF MELKOW, GERMANY.

SWINGLETREE-CLASP.

SPECIFICATION forming part of Letters Patent No. 728,947, dated May 26, 1903.

Application filed November 11, 1902. Serial No. 130,873. (No model.)

To all whom it may concern:

Be it known that I, OTTO LORENZ, smith, a subject of the King of Prussia, German Emperor, residing at Melkow, near Schönhausen, Elbe, Germany, have invented a new and useful Improvement in Clasps on Swingletrees, of which the following is a specification.

My invention refers to clasps on swingletrees or swing-bars or such like. Its purpose is to avoid those imperfections which the hitherto usual clasps have—namely, the fixing when hot, whereby the wood of the swingletree has to be exactly fitted beforehand. Then the charred parts of the wood caused by the hot clasps have an unsightly appearance if not painted. Further, when fixing the assistance of a smith was always necessary, also when tightening loose clasps or changing the same. Still more difficult was the work when the middle clasp had to be renewed, as then an end clasp had to be removed. Besides this all the clasps must be renewed when their front parts have been worn out by the constant friction of the draw-chains.

In the annexed drawings a clasp according to this invention is represented.

Figure 1 shows a clasp in one piece from a side view. Fig. 2 shows the same in a front view. Fig. 3 shows a clasp consisting of several parts from a side view. Fig. 4 shows the same seen from above. Fig. 5 shows a clasp consisting of several connected parts in a side view. Fig. 6 shows the drawing arrangement of a carriage for two horses provided with the new invention.

Instead of the welded hitherto usual ring-like clasp I form the clasp so that the two front parts *a* are free and stand off from the

wood *b* of the swingletree *c* like a fork. The other parts at the back are now connected to each other in a suitable manner, either by a spring-like band *d*, Figs. 1 and 2, by a screw *e*, Figs. 3 and 4, or by a hinge *f*, Fig. 5. Close to the wood *b* in the front part is a screw *g*, by means of which after the parts are placed loose around the wood *b* they can be screwed tightly and in this manner securely fastened to the wood. When the wood gets dry, causing the clasp to become loose, then a tightening of the screw *g* is only necessary in order to fasten the clasp again without the help of a smith. In the front part of the ends there is a bolt or screw *h* provided, on which the draw-chain of the animal fastens. To prevent this screw from being worn, it passes through a metal piece *i*, placed between the free ends *a*, so that the friction of the draw-chain only affects this piece *i*. As this piece *i* is very easily changed, a clasp of this kind is of almost unlimited duration.

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

In a clasp on swingletrees the combination of two curved parts each part having on each end a projecting jaw provided with coincident holes, with screw-bolts in said holes and a metal piece surrounding the bolt catching the draw-chain, as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

OTTO LORENZ.

Witnesses:

JAMES BURRELL,
ERICH PETERS.