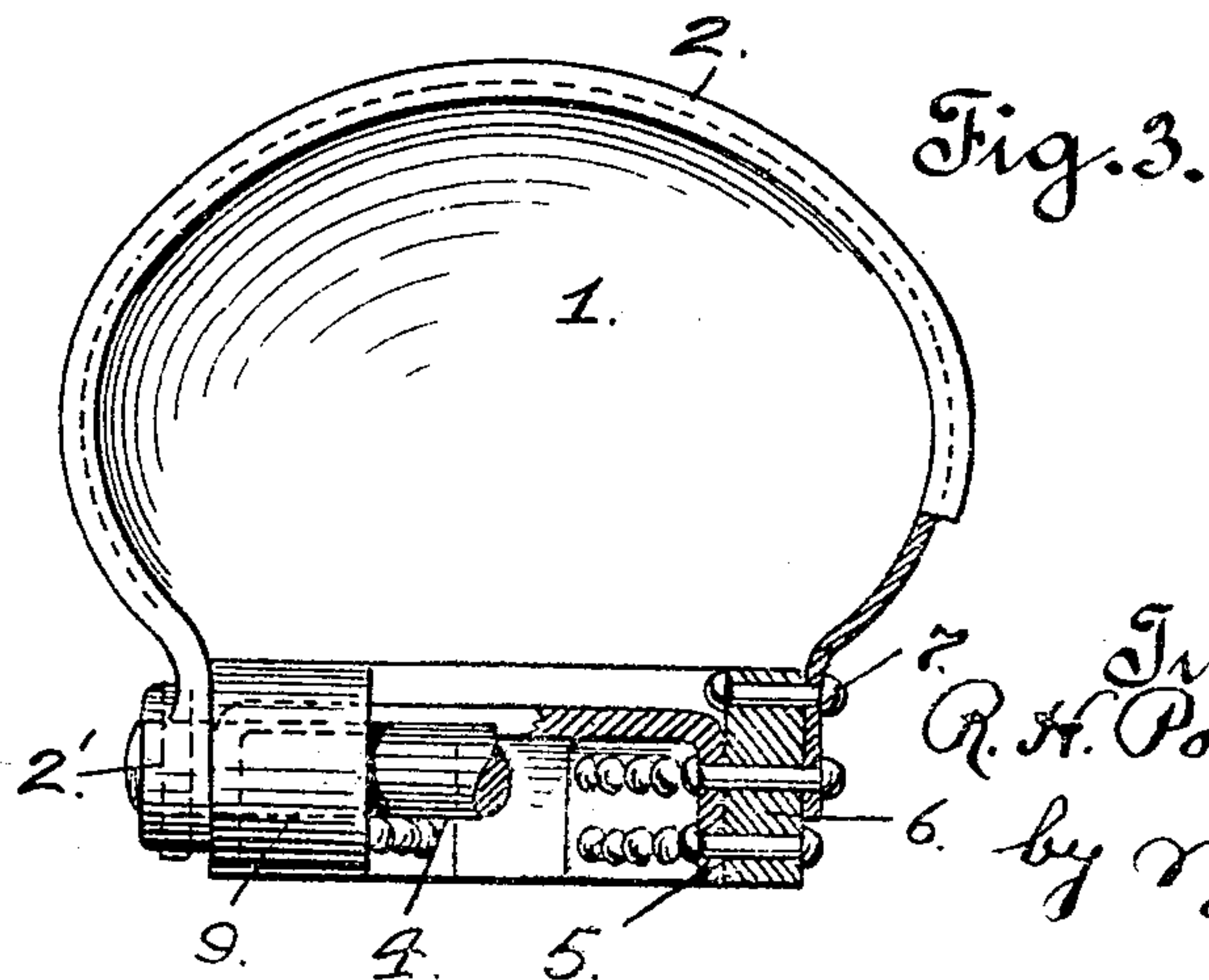
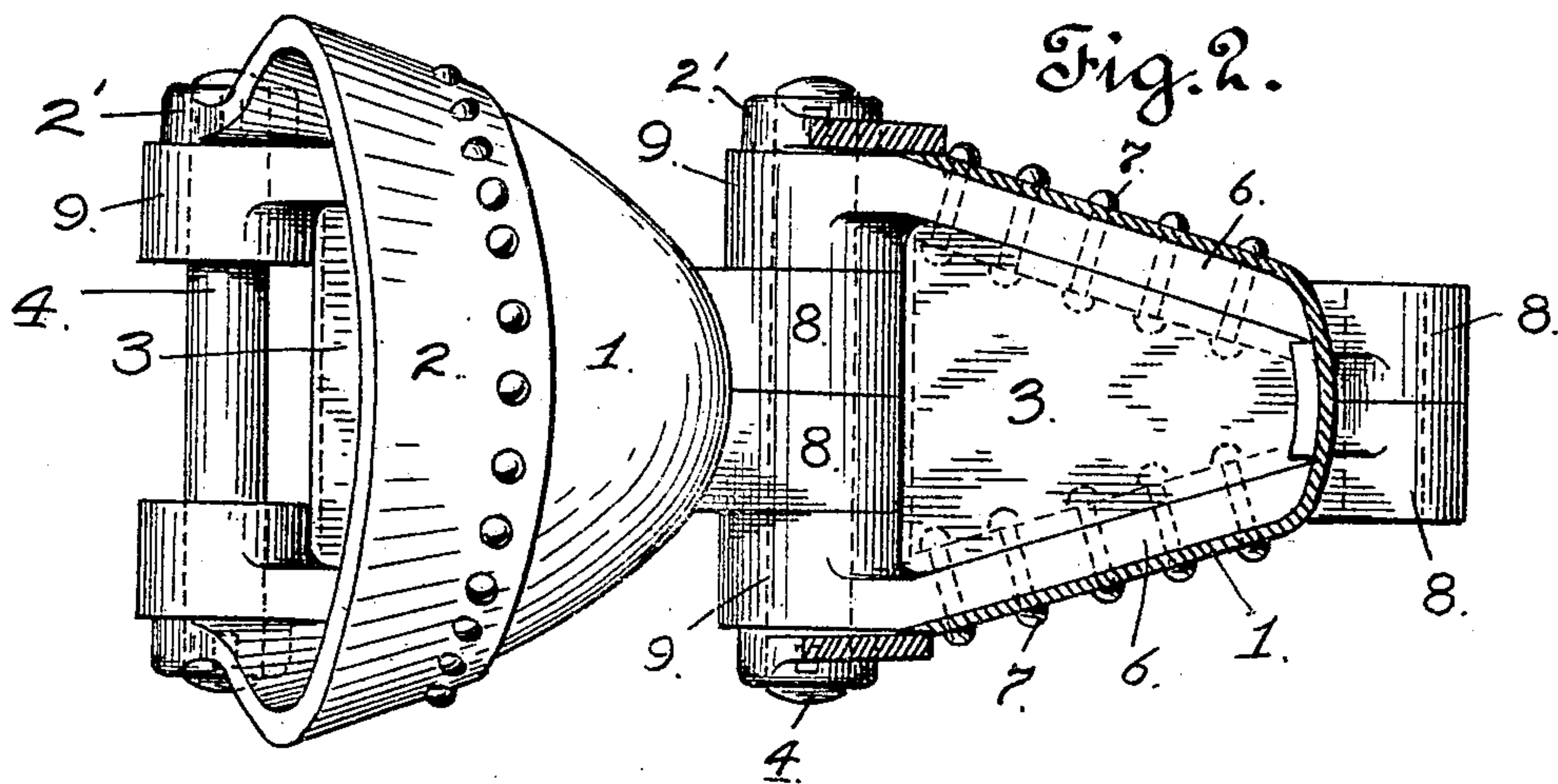
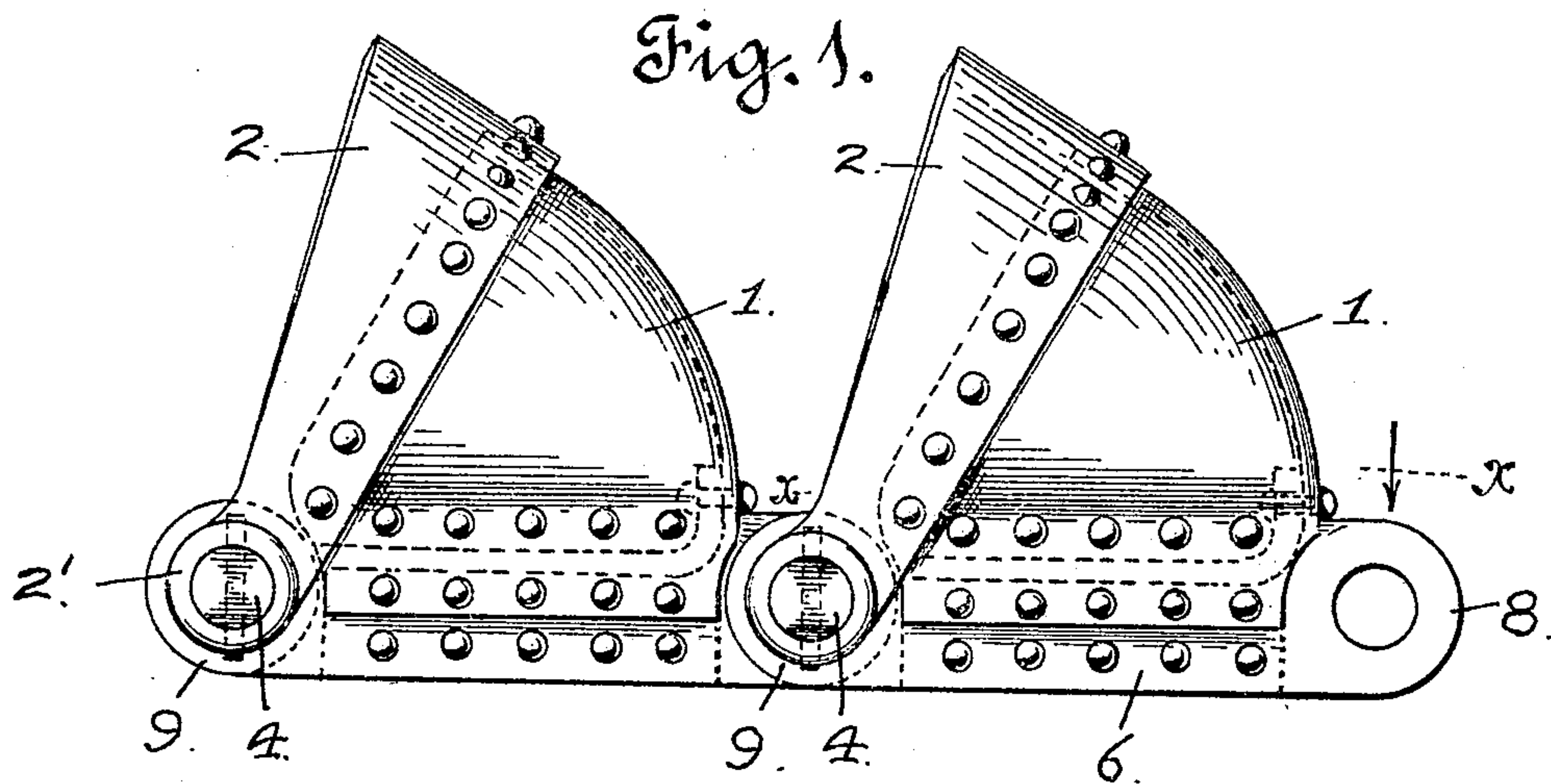


No. 795,417.

PATENTED JULY 25, 1905.

R. H. POSTLETHWAITE.
EXCAVATING BUCKET.
APPLICATION FILED APR. 3, 1905.



Witnesses.

H. Monteverde.

J. Compton.

Inventor
R. H. Postlethwaite
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his atty.

UNITED STATES PATENT OFFICE.

ROBERT H. POSTLETHWAITE, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR
TO RISDON IRON AND LOCOMOTIVE WORKS, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

EXCAVATING-BUCKET.

No. 795,417.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed April 3, 1905. Serial No. 253,389.

To all whom it may concern:

Be it known that I, ROBERT H. POSTLETHWAITE, a subject of the King of Great Britain, residing in the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Excavating-Buckets; and I do hereby declare the following to be a full, clear, and exact description of the same.

The present invention relates to that type or class of buckets generally employed in connection with the endless-chain elevators used on dredging-machines, more especially gold-dredgers, the objects of the invention being to so construct the bucket as to permit of the bottom being readily disconnected from the link-sections, whereby either of the parts may be removed or separated for the purpose of repairs in case of excessive wear thereof or for the insertion of new parts in case of damage resulting thereto by reason of the severe use to which the bucket is subjected during the operation of the dredger, and in so arranging the cutting-lip of the bucket as to transfer the strains due to the cutting action of the bucket from the body of the bucket to the connecting link-pins, thereby permitting of the construction of the entire bucket being materially simplified and the bucket so strengthened as to protect the weakest portion thereof, besides providing a bucket wherein each of its wearing parts may be readily disconnected when worn out and replaced by new parts, thereby essentially prolonging the usefulness of the bucket.

To comprehend the invention, reference should be had to the accompanying sheet of drawings, wherein—

Figure 1 is a side view in elevation of two connected buckets which constitute a portion of an endless excavating chain bucket elevator. Fig. 2 is a plan view of the said buckets, one of the buckets being sectioned on the line *x x*, Fig. 1 of the drawings; and Fig. 3 is a rear view in elevation of one of the buckets, a portion of its cutting-lip, bottom, bearing-bolt, and uniting-link being sectioned.

The numeral 1 is used to indicate the usual body of the buckets, to the upper edge of which is united by rivets the steel lip 2. The ends of this cutting-lip are projected to extend below the bottom or bottom-plate 3 of the bucket and terminate in bearings 2', through which bearings extends the bearing link pin or bolt 4, on which the bucket turns.

By thus connecting the cutting-lip 2 to the bearing link-pin 4 the strain of the bucket cutting through the material to be excavated is transferred from the body of the bucket to the said bearing link-pin.

The lower portion of the bucket's body is closed by the bottom or bottom-plate 3, the depending flange 5 of which bottom and the lower edge of the bucket's body 1 being united to the link-section 6 by means of the rivets 7.

Instead of forming the bottom of the bucket and the link-section thereof in one casting, as has heretofore been the case, the bottom is formed separate from the link-section and riveted thereto. This construction permits of the bottom being formed of a steel plate and the link-section 6 of any desired material. The essential advantage derived from such a construction resides in the fact that in case of a damaged or worn-out bucket-bottom or link-section it is not necessary to discard an entire bottom and link-section, but simply to disconnect the worn or damaged parts and replace the same with a new one. The expense of repairing the damaged bucket is thus reduced to a minimum. When the number of buckets employed and the extreme hard use to which they are subjected are considered, the saving thus created by being enabled to replace any worn-out part is apparent.

Each link-section 6 is formed with a rearwardly-projecting bearing-ear 8, which ear fits between the forwardly-projecting bearing-ears 9 of the link-section of the preceding bucket, said ear 8 being held between the ears 9 by means of the link pin or bolt 4, which passes through said ears and the projecting bearing 2' of the cutting-lip 2.

The link pins or bolts 4 are substantially the same as those commonly employed for the security of excavating-buckets.

Having thus described the invention, what is claimed as new, and desired to be protected by Letters Patent, is—

1. An excavating-bucket, the same comprising a body portion, a cutting-lip secured to the upper edge thereof, the ends of said lip terminating in bearings which project below the bottom edge of the bucket, a bottom plate and a link-section, the link-section being united to the lower edge of the bucket's body, said link-section being provided with forwardly-projecting and rearwardly-projecting bearing-ears.

2. In an excavating-bucket, the combina-

tion with the body thereof, of a cutting-lip united to the upper edge thereof, the ends of said cutting-lip terminating in bearings projected beyond the bottom edge of the bucket's bottom, said bearings receiving the link pin or bolt for the securing of two buckets.

3. In an excavating-bucket, the combination with the body thereof, of a link-section united to the lower edge of said body, said link-section being provided with forwardly-projecting and rearwardly-projecting ears.

4. In an excavating-bucket, the combina-

tion with the body thereof, of a bottom, a link-section, said bottom and link-section being united to each other and to the bottom edge of the bucket's body, and forwardly and rearwardly projecting ears projecting from the link-section.

In witness whereof I have hereunto affixed my signature in the presence of two witnesses.

ROBERT H. POSTLETHWAITE.

In presence of—

N. A. ACKER,

D. B. RICHARDS.