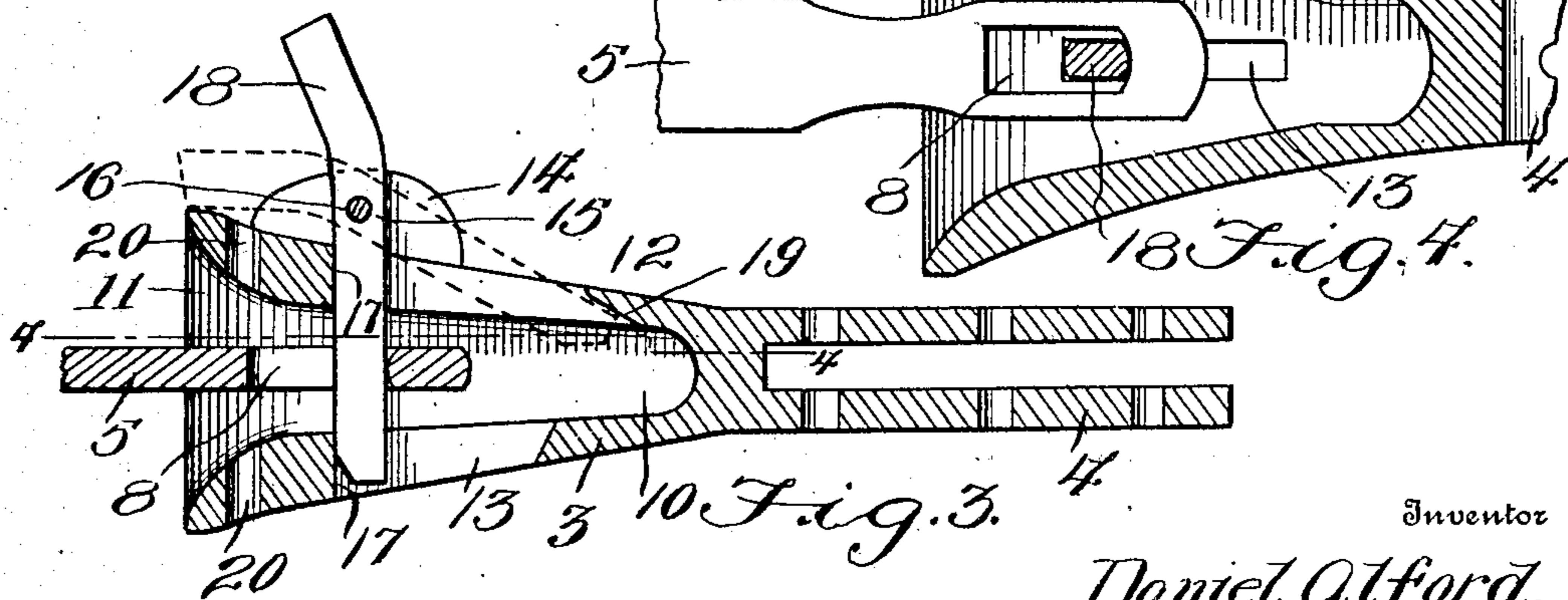
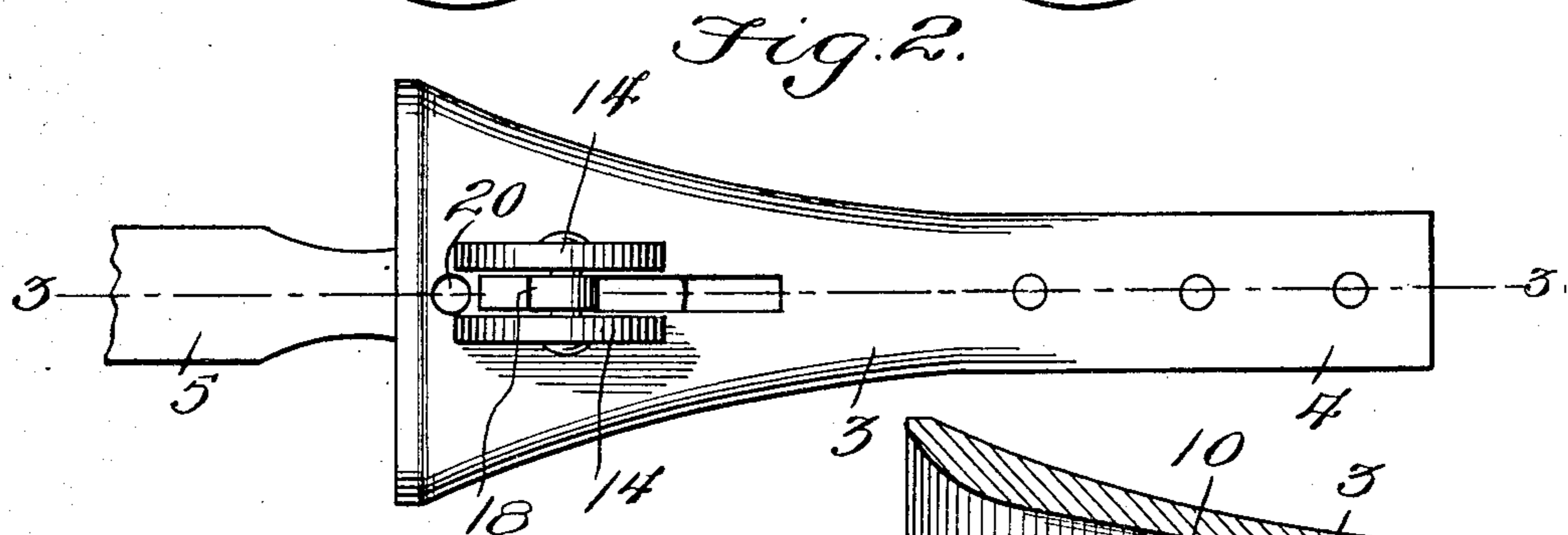
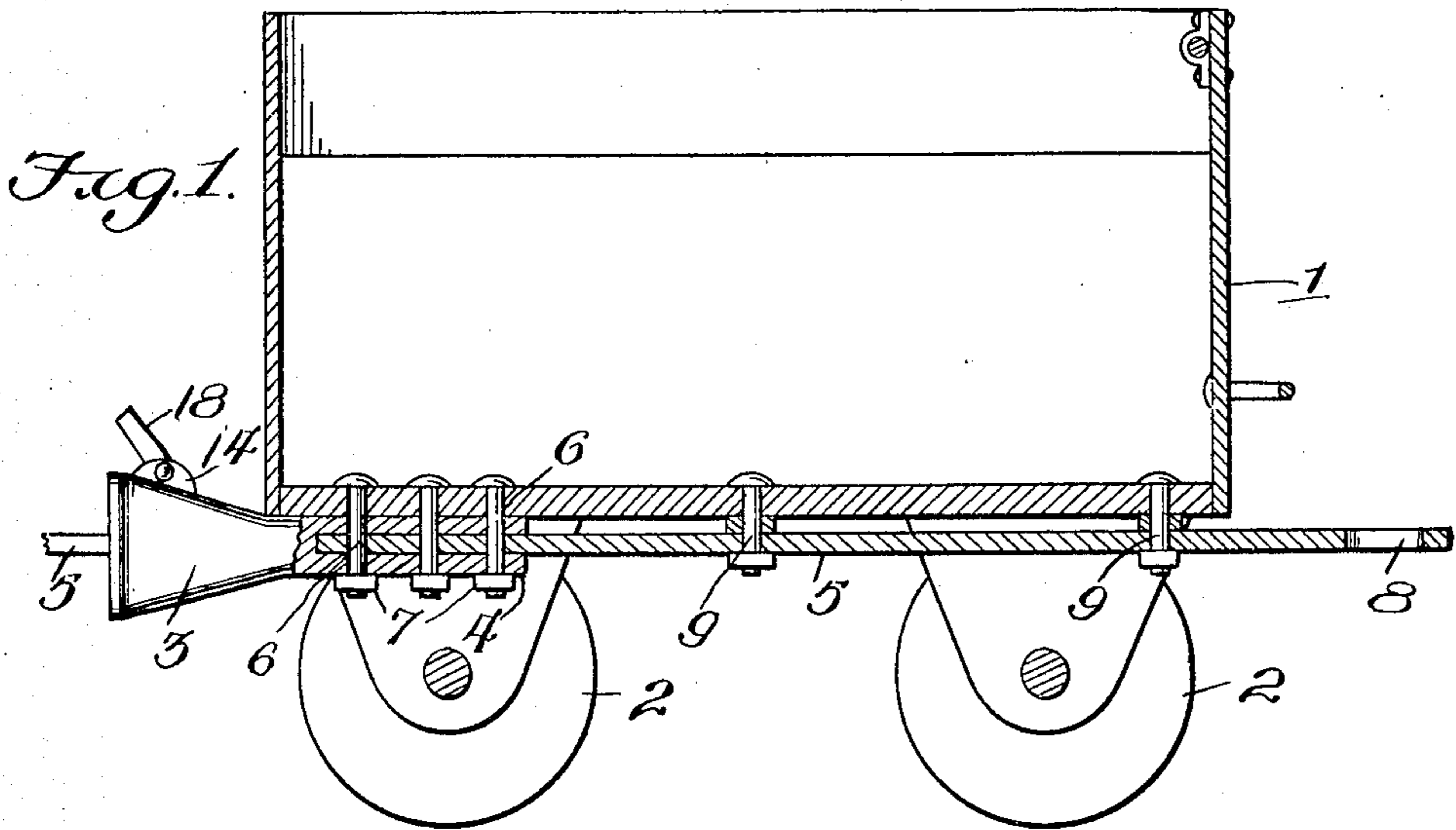


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CAR COUPLING.  
APPLICATION FILED MAY 2, 1908.

916,246.

Patented Mar. 23, 1909.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## CAR-COUPLING.

No. 916,246.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed May 2, 1908. Serial No. 430,579.

*To all whom it may concern:*

Be it known that I, DANIEL ALFORD, a citizen of the United States of America, residing at Cuba, in the county of Fulton and State of Illinois, have invented new and useful Improvements in Car-Couplers, of which the following is a specification.

My invention relates to car couplers, and its primary object is to provide a device of this character which is especially designed for use on mining cars, which is simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

With the above and other objects in view, the invention consists in the construction, combination and arrangement of parts hereinafter fully described, claimed and illustrated in the accompanying drawing, wherein:

Figure 1 is a sectional view taken on a plane vertically and centrally through a mining car equipped with a coupler constructed in accordance with my invention. Fig. 2 is a top plan view of the coupler. Fig. 3 is a vertical sectional view taken on a plane indicated by the line 3—3 of Fig. 2, and Fig. 4 is a horizontal sectional view taken on a plane indicated by the line 4—4 of Fig. 3.

Referring to the drawing by reference numerals, 1 designates the body, and 2 the supporting wheels of a mining car of the usual form and construction.

My improved coupler comprises a drawhead 3 which is provided with a slotted extension 4. One end of a drawbar 5 is mounted in the slot of the extension 4 of the drawhead. The drawhead is secured to the bottom of the mining car, and the end of the drawbar is secured in the slot of the drawhead by means of bolts 6, the bolts passing through the bottom of the car, the extension and the drawbar, and projecting ends of the bolts being threaded for the reception of nuts 7. The opposite end of the drawbar projects beyond the end of the car and is provided with an opening 8 to receive the pin of the drawhead of the next adjacent car. The drawbar is also secured to the bottom of the car by means of bolts and nuts 9, which pass through the bottom of the car. The drawhead is provided with a longitudinally extending recess 10 adapted to receive the projecting ends of the drawbar of the next adjacent car, and the drawhead is flared, as

at 11, to direct said end of the drawbar into the recess. The upper and lower sides of the drawhead are provided with slots 12 and 13, respectively, which extend longitudinally thereof and which communicate with the recess 10. A pair of ears 14 is formed on and rises vertically from the upper side of the drawhead, one of said ears being arranged on each side of the slot 12.

A pin 15 is pivotally mounted at a point intermediate its ends between the ears 14 upon a bolt 16, said bolt passing through the ears and the pin. The pin extends across the recess 10 of the drawhead and is adapted to automatically engage the opening 8 of the drawbar of the next adjacent car to couple the cars together. The opening 8 of the drawbar is large enough to permit the cars to have relative movements so as not to throw any undue strain on the pin during the shifting of the cars. When the pin is in coupling position, it contacts with the outer end walls 17 of the slots 12 and 13, whereby to prevent any strain from being thrown on the bolt 16. That portion of the pin 15 which extends above the pivotal bolt 16 is formed to provide a handle 18, by means of which the pin may be swung out of the opening 8 of the drawbar 5 when it is desired to uncouple the cars. This movement of the pin is limited by the handle 18 engaging the drawhead and the lower end of the pin engaging the inclined inner end wall 19 of the slot 12. The pin is held by gravity in its coupling position, whereby when the projecting end of the drawbar passes into the recess 10, the pin is swung into uncoupling position, that is, into the position shown by dotted lines of Fig. 3 of the drawing. When the end of the drawbar has been moved inwardly a sufficient distance, the lower end of the pin drops into the opening 8 thereof, thus coupling the cars together. The drawhead is provided with openings 20 to permit a draft animal to be secured to the drawhead by means of a hook.

It should be apparent from the above description taken in connection with the accompanying drawing, that I provide a car coupler which is admirably adapted for the purpose for which it is intended, which is simple, durable and efficient, and which may be manufactured and sold at a comparatively low cost.

Changes in the form, proportions and minor details of construction may be made

within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

Having fully described and illustrated my invention, what I claim is:

The combination with a car, of a drawhead provided with a slotted extension, a pin mounted upon the drawhead, a draft bar having one end disposed in the slot of the extension and its other end projected beyond the car, said projected end being provided

with an opening, and bolts passing through the extension and drawhead to secure the drawhead and draft bar together and to the car.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL ALFORD.

Witnesses:

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