No. 803,729. PATENTED NOV. 7, 1905.

J. & J. O. TIMMS.

COUPLING.

APPLICATION FILED JULY 8, 1905.

Fig. 1.

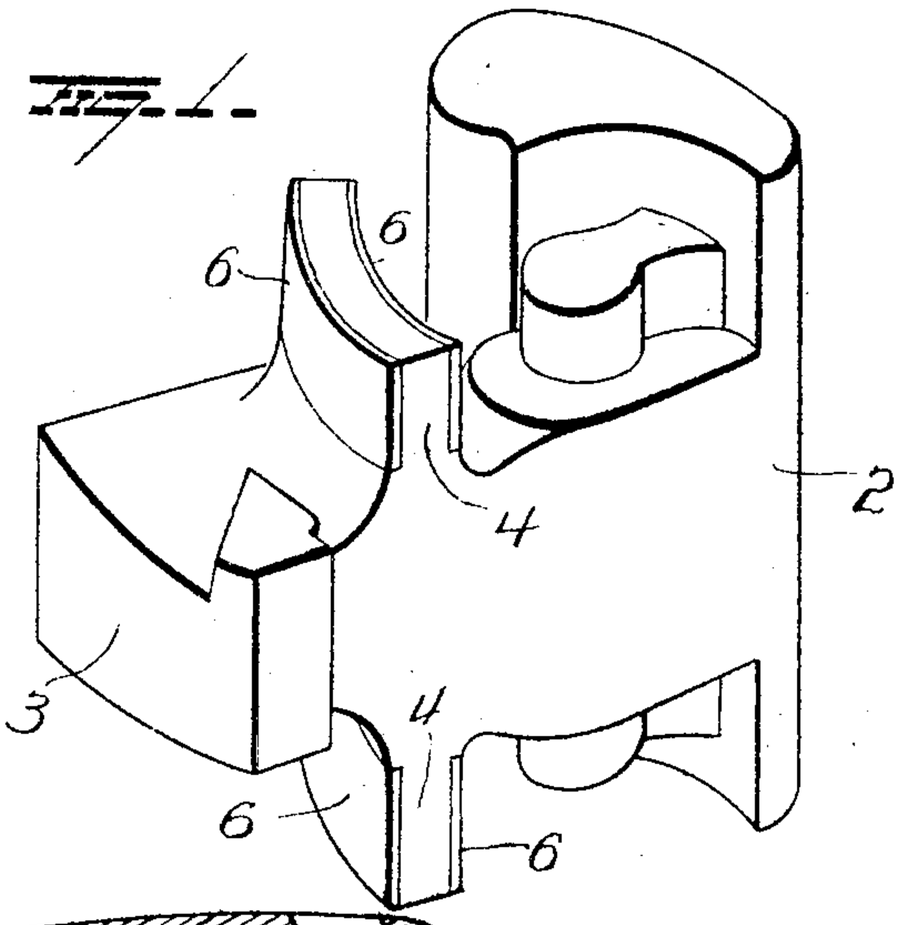

Fig. 2.

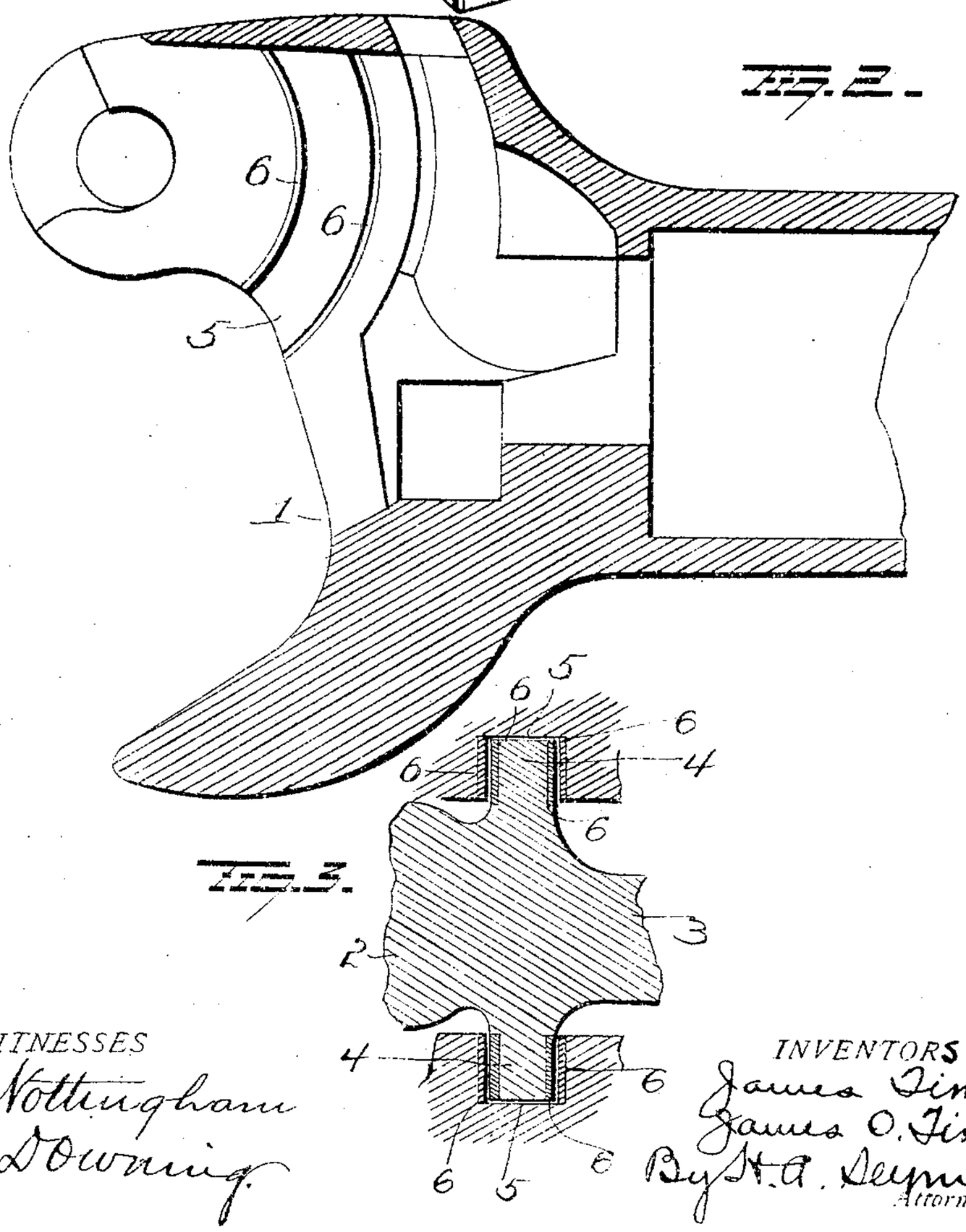

Fig. 3.

WITNESSES

E. L. Nottingham

G. F. Downing.

INVENTORS

James Timms and

James O. Timms

By St. G. Seymour

Attorney

UNITED STATES PATENT OFFICE.

JAMES TIMMS AND JAMES O. TIMMS, OF COLUMBUS, OHIO.

COUPLING.

No. 803,729. Specification of Letters Patent. Patented Nov. 7, 1905.

Application filed July 8, 1905. Serial No. 268,769.

To all whom it may concern.

Be it known that we, JAMES TIMMS and JAMES O. TIMMS, residents of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Couplings; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in couplings, the object of the invention being to so construct the knuckle and head of the coupling as to increase its efficiency and lengthen the life of the coupling, and this is accomplished by casting into the tail of the knuckle and in the head steel plates, preferably self-hardening steel plates, to take the wear caused by the buffing and pulling strains as well as the wear in opening and closing the knuckle.

With these objects in view the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a knuckle provided with our improvements. Fig. 2 is a view in section of the head, and Fig. 3 is a view in cross-section through the wearing-faces.

1 represents a coupling-head, 2 the knuckle, and 3 the tail on the inner end thereof. The particular construction of coupling illustrated is one wherein no pivot-pin is necessary; but it is to be understood that this invention is not restricted to that type of coupling, but is broad enough to include any type of coupling in which a pivoted knuckle is employed.

On the upper and lower faces of tail 3 curved webs 4 are located and move in corresponding grooves 5 in the top and bottom walls of the coupling-head, and in casting the head and knuckle steel plates 6 (preferably self-hardening) are inserted in the molds and cast into the front and rear of webs 4, forming the front and rear wearing-faces thereof, and also form the faces of grooves 5 to take the wear of the buffing and pulling strains and also the wear in opening and closing the knuckle, which increases the efficiency of the coupling by greatly lengthening its life.

A great many slight changes might be made in the general form and arrangement of parts described without departing from our invention, and hence we do not restrict ourselves to the precise details set forth, but consider ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination with a coupling-head and a pivoted knuckle therein, of plates between the knuckle-tail and the coupling-head to sustain the wear.

2. The combination with a coupling-head and a pivoted knuckle therein, of a tail on the knuckle, curved webs on the knuckle-tail to enter corresponding grooves in the head, and steel plates cast into the webs and walls of the grooves to sustain the wear.

3. The combination with a coupling-head, and a pivoted knuckle therein, of a tail on the knuckle, curved webs on the upper and lower faces of the tail to enter corresponding grooves in the head, and steel plates cast into the knuckle and head and forming the front and rear wearing-faces of the webs and grooves.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

JAMES TIMMS.
JAMES O. TIMMS.

Witnesses:
THOMAS H. BENNETT,
FRANK T. CLARKE.