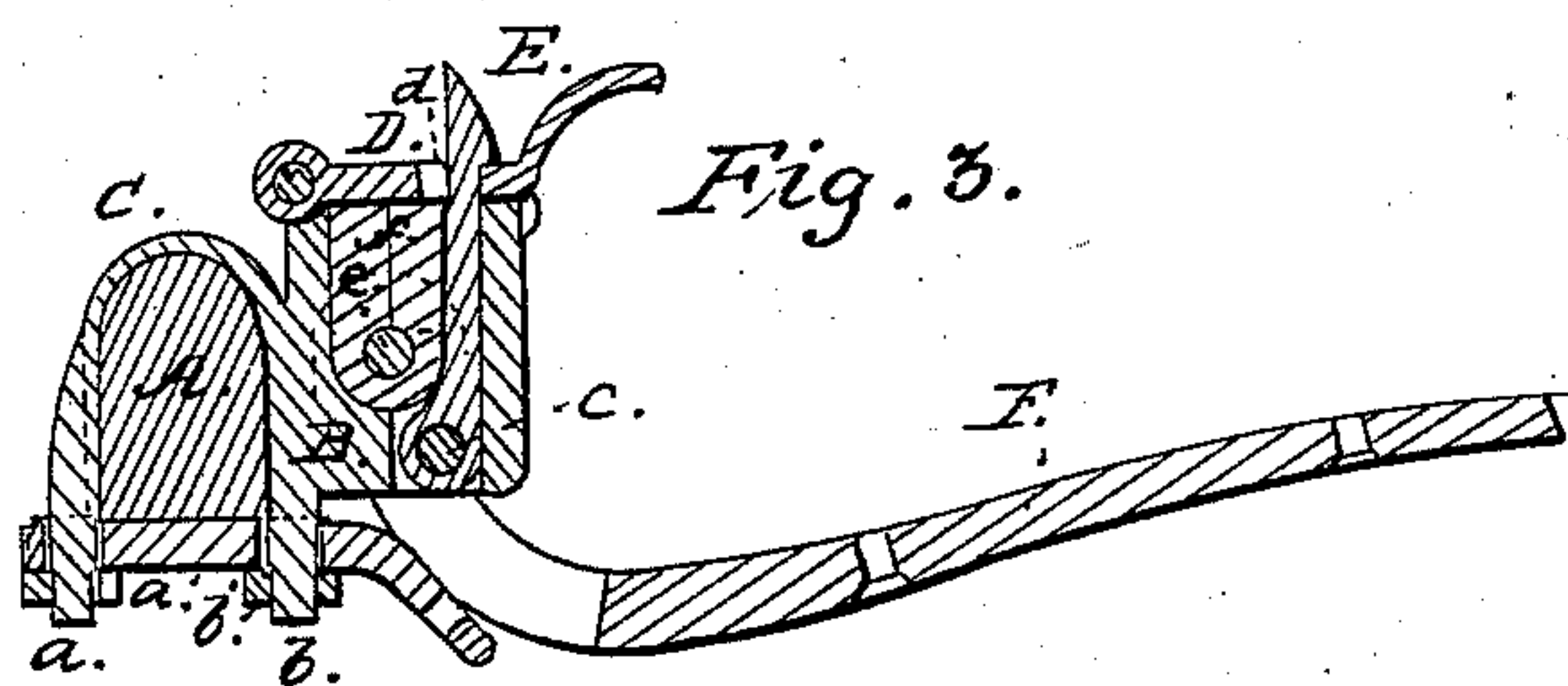
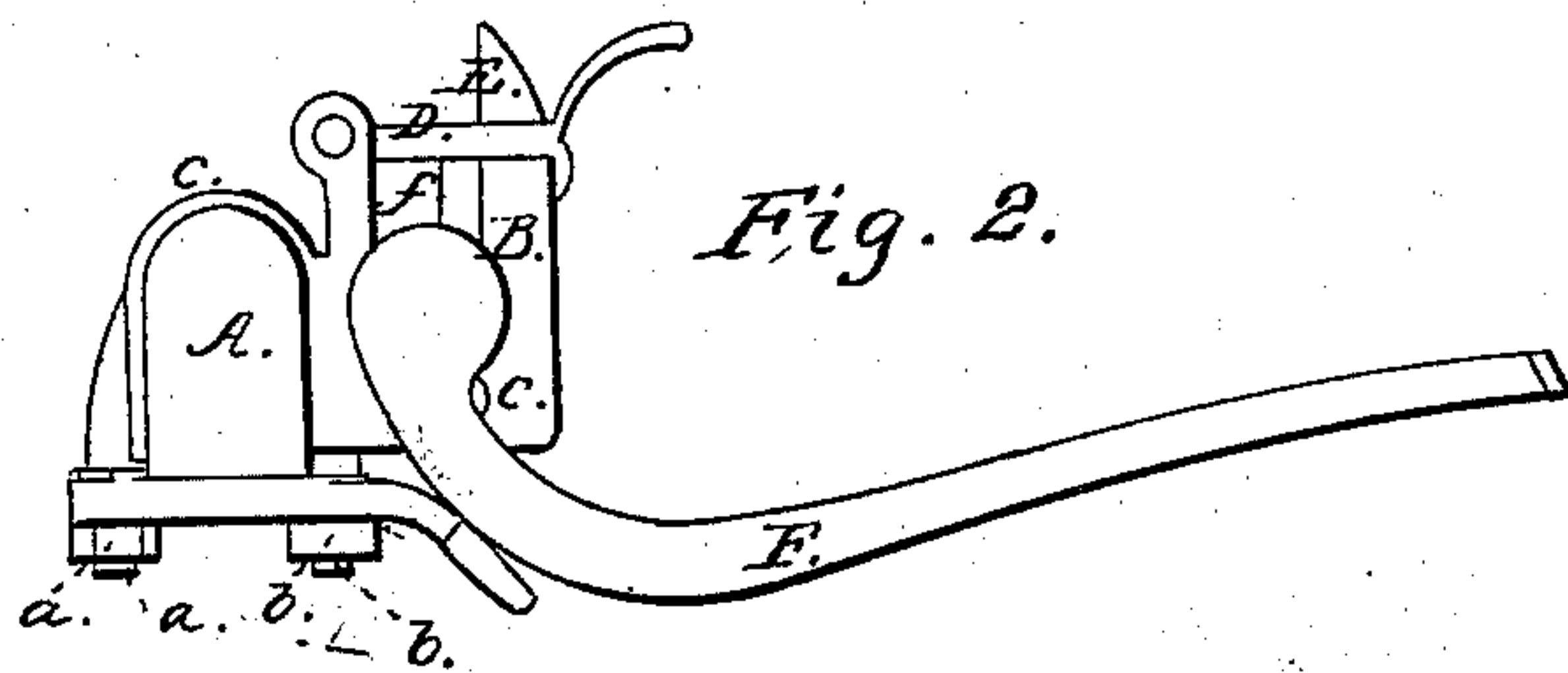
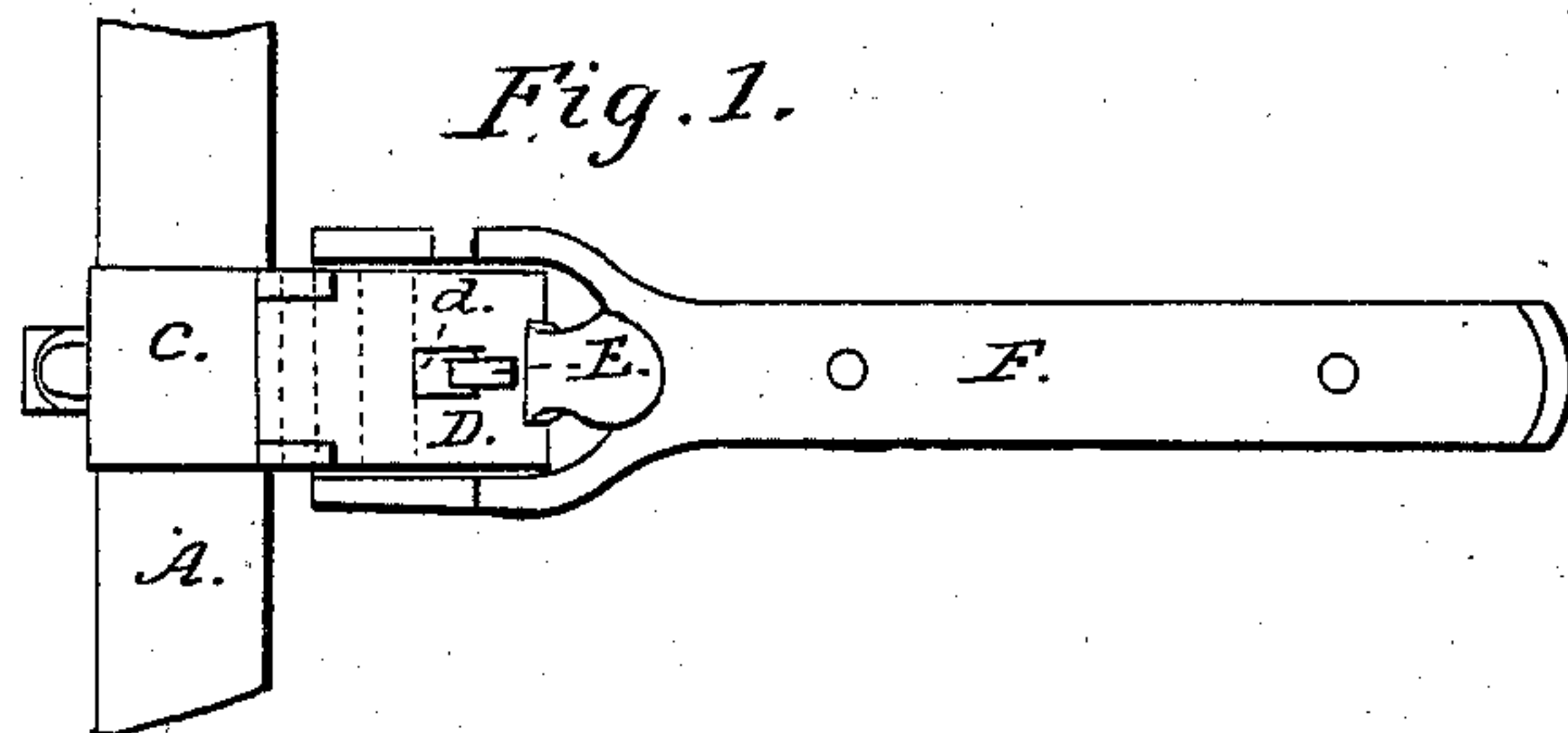


C. THOLL.  
Thill-Coupling.

No. 70,289.

Patented Oct. 29, 1867.



Witnesses:

S. N. Piper  
H. P. Hale Jr.

Inventor:

Charles Tholl.

By his attorney  
R. H. Raby.

# United States Patent Office.

CHARLES THOLL, OF BOSTON, MASSACHUSETTS.

*Letters Patent No. 70,289, dated October 29, 1867.*

## IMPROVEMENT IN CARRIAGE-SHAFT CONNECTION.

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

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, CHARLES THOLL, of Boston, in the county of Suffolk, and State of Massachusetts, have invented a new and useful or improved Carriage-Shaft Connection; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view,

Figure 2 a side elevation, and

Figure 3 a longitudinal section of it.

In such drawings, A denotes the front axle of a carriage, having a journal-box, B, fixed to it by a yoke, C, and its clamp-screws and nuts, as shown at *a b a' b'*. This box, formed as represented, has a cap or cover, D, hinged to it, and held down in place by a lever-catch, E, arranged within the box, and turning on a pin or fulcrum, *c*. The catch works through a slot, *d*, in the cover of the box. F is a forked arm, which is to have a pin or journal, *e*, extended from one prong to the other of the fork, and is to be projected from the shaft. This journal, *e*, is embraced by a strip or piece of vulcanized India rubber, *f*, made to fit into the box in manner as shown in the drawings. The journal turns within the strip of rubber, which also answers as a spring to the latch, and to prevent the journal from making a noise in the bearing while the carriage may be in use. By lifting the cover of the box the shaft-arm may be easily disengaged from the box, the latch, when the journal and strip of rubber are in place within the box, operating to so keep them therein.

I claim my improved shaft-connection, constructed substantially as described, viz, of the open box B, with its cover and catch, and the strip of rubber, or its equivalent, arranged and applied together to the journal of the forked arm F and to the axle, substantially in manner as hereinbefore specified.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.

CHARLES THOLL.