

(No Model.)

J. T. SOLLENBERGER.

THILL COUPLING.

No. 370,094.

Patented Sept. 20, 1887.

Fig. 1.

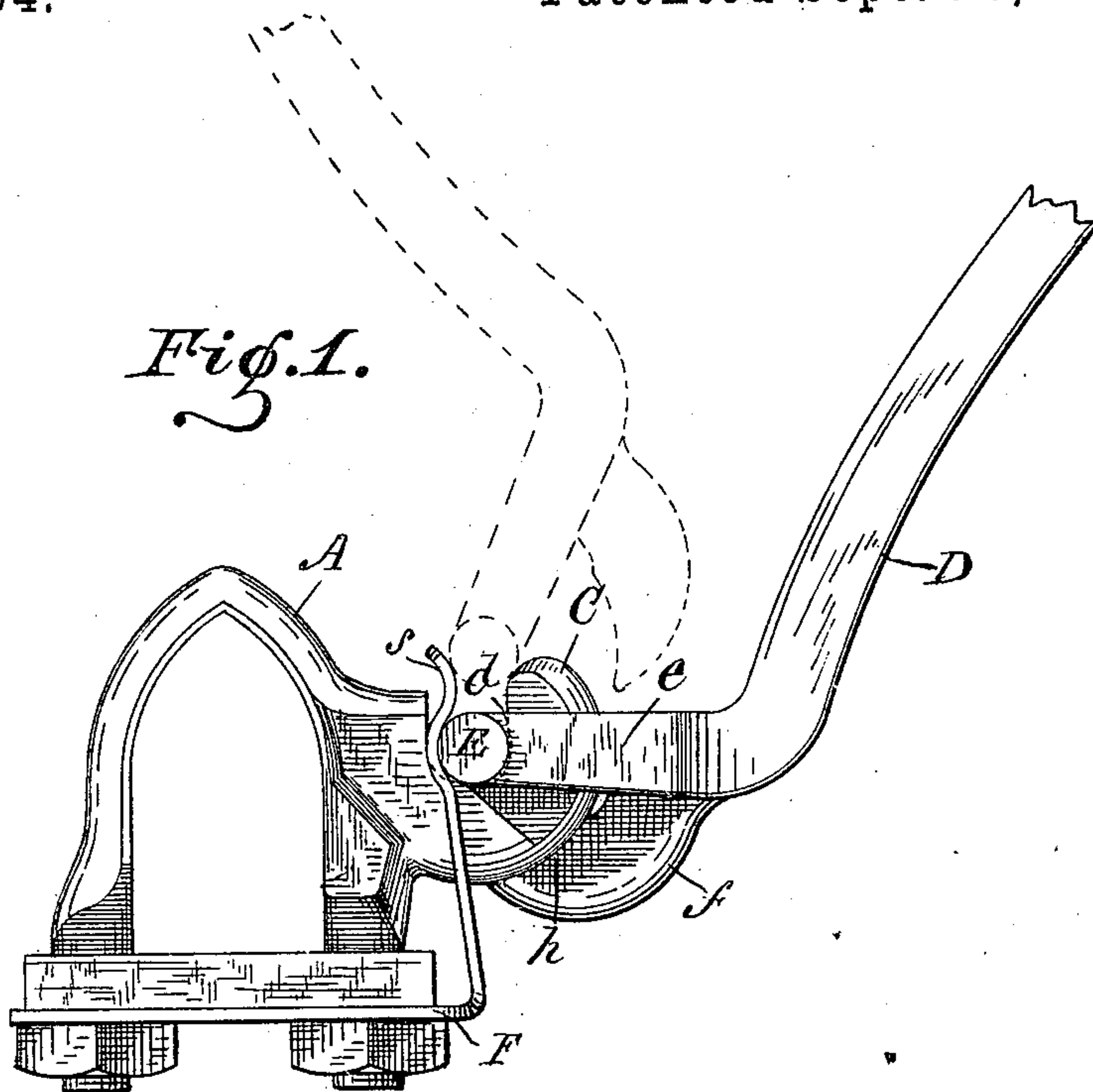


Fig. 2.

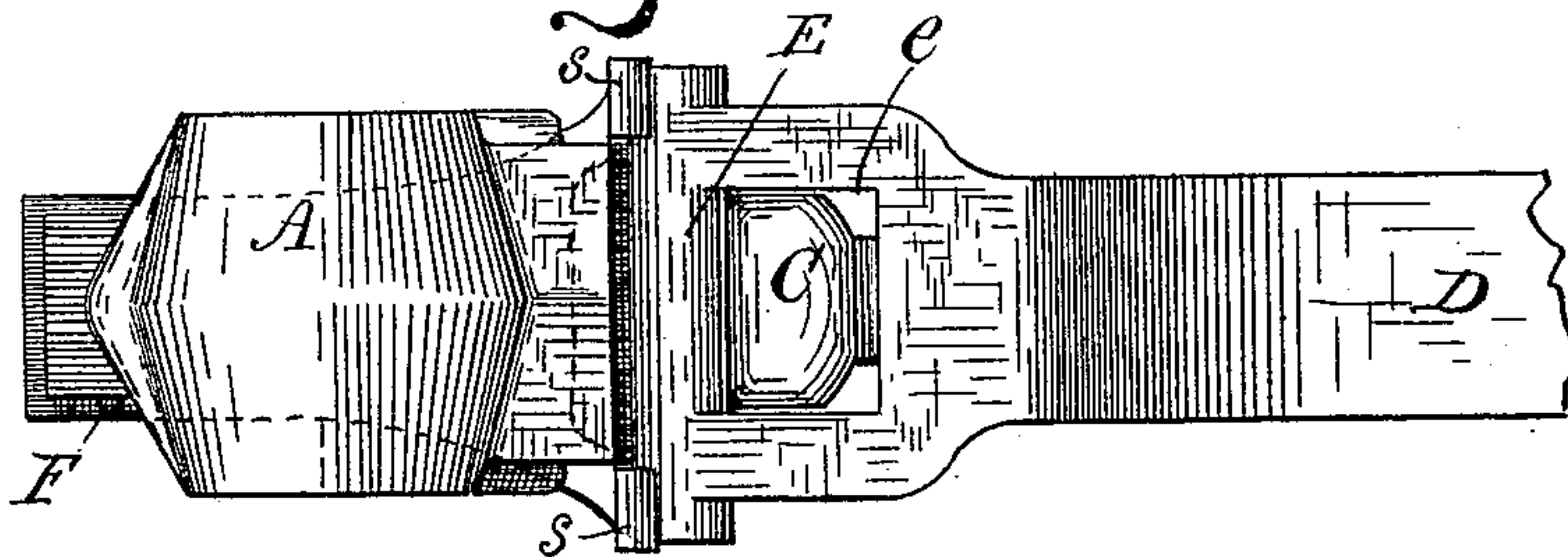
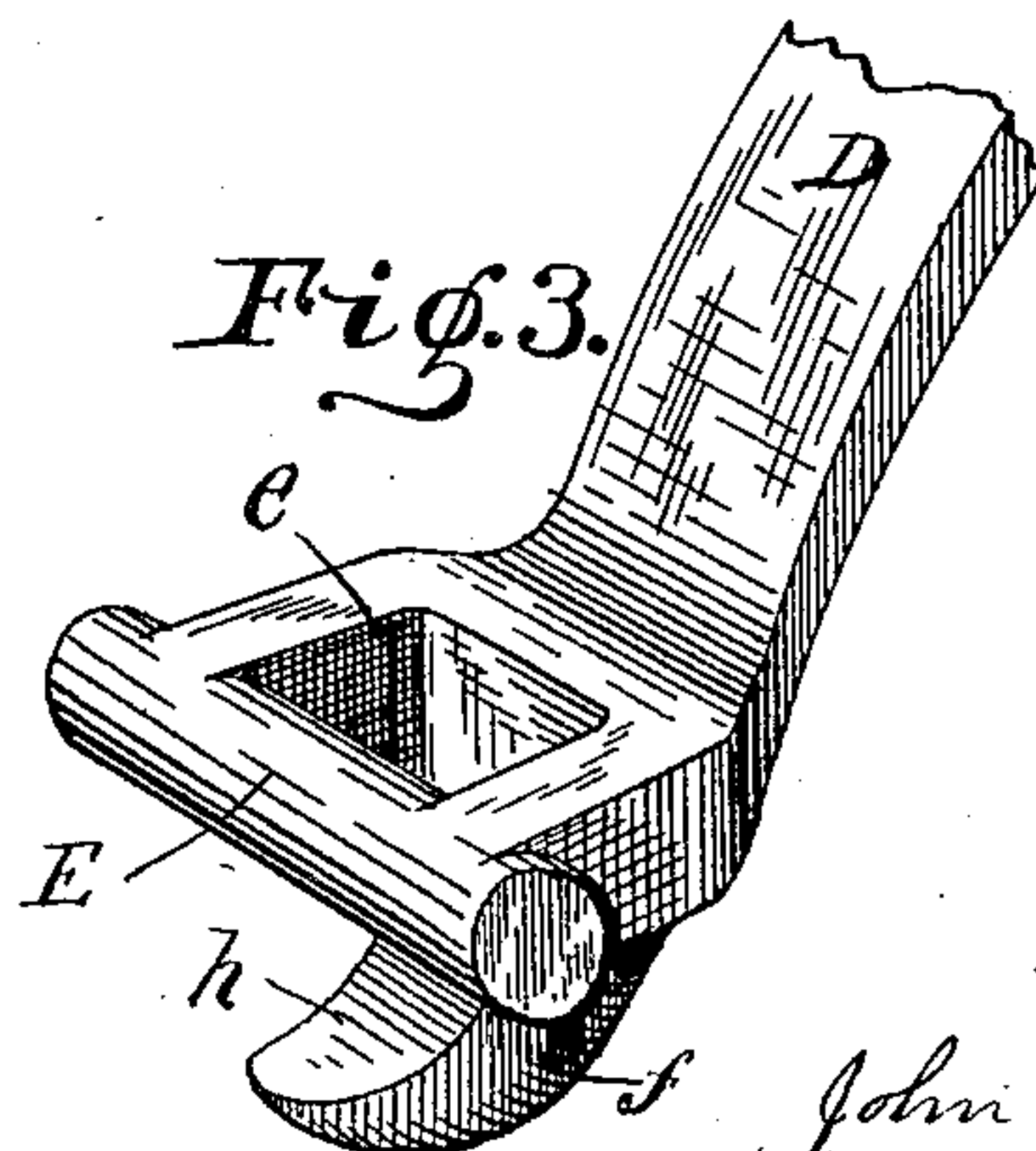


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN T. SOLLENBERGER, OF KOKOMO, INDIANA.

THILL-COUPLING.

SPECIFICATION forming part of Letters Patent No. 370,094, dated September 20, 1887.

Application filed June 23, 1887. Serial No. 242,246. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. SOLLENBERGER, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented a new and useful Improved Thill-Coupling, of which the following is a specification.

My invention relates to an improved means for coupling carriage-thills to the carriage.

The object of my improvement is to avoid the use of separate connecting-pieces, as bolts or screws, in detachably securing the thills to a carriage and to avoid a loose rattling of the same, all as hereinafter fully described.

The accompanying drawings illustrate my invention.

Figure 1 is a side elevation of one of the couplings. Fig. 2 is a plan of the same. Fig. 3 is a view in perspective of the thill-iron.

A is a clip adapted to embrace the axle, and having on its forward side a projecting upturned hook, C, whose inner surface forms a semicircular bearing at *d*, (shown in dotted lines, Fig. 1,) and a portion of whose outer surface is concentric with its inner surface.

D is the thill-iron, to which the thill (not shown) is secured by bolts or rivets in the usual well-known manner. The lower end of the thill-iron terminates in an eye, *e*, one side of which is formed by a cylindrical transverse bar, E, adapted to turn easily in the semicircular bearing *d*. Formed upon the under side of the thill-iron, opposite the eye *e*, is a lug, *f*, whose upper surface, *h*, is concentric with the bar E, and is arranged to fit the outer surface of hook C when the bar rests in the hook.

F is a steel plate having its outer end forked and turned upward to form a pair of flat springs, *s s*, which engage bar E and hold it in

close contact with the hook, and thereby prevent any rattling of the bar.

In operation the thill-iron is raised to the position shown in dotted lines, Fig. 1, and the bar E is pushed down into the bearing *d*. The thill-iron being now turned down to the position for use, (shown in full lines,) the lug *f* engages the outside of the hook, and, while permitting a free swinging movement, the thill-iron and hook are securely interlocked, so that no possible movement of a horse harnessed to the thills in the usual manner can disconnect them.

I claim as my invention—

1. In a thill-coupling, the combination of the clip, adapted to be secured to the axle of a carriage and having a projecting upturned hook whose inner and outer surfaces are concentric, and the thill iron having an eye adapted to receive the hook, a transverse bar, and a projecting lug, said bar and lug being adapted to engage and turn, respectively, on the inner and outer surfaces of the hook, all substantially as and for the purpose specified.

2. In a thill-coupling, the combination, with the clip, the hook projecting therefrom and having concentric inner and outer surfaces, and the thill-iron having an eye adapted to receive said hook, a transverse bar, and a projecting lug, said bar and lug being adapted to engage and turn, respectively, on the inner and outer surfaces of the hook, of the pair of flat springs arranged to engage the bar and hold it against the hook, substantially as and for the purpose specified.

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Witnesses:

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