

C. Boynton.
Thill Coupling.
N^o 66,784. Patented Jul. 16, 1867.

Fig: 1.

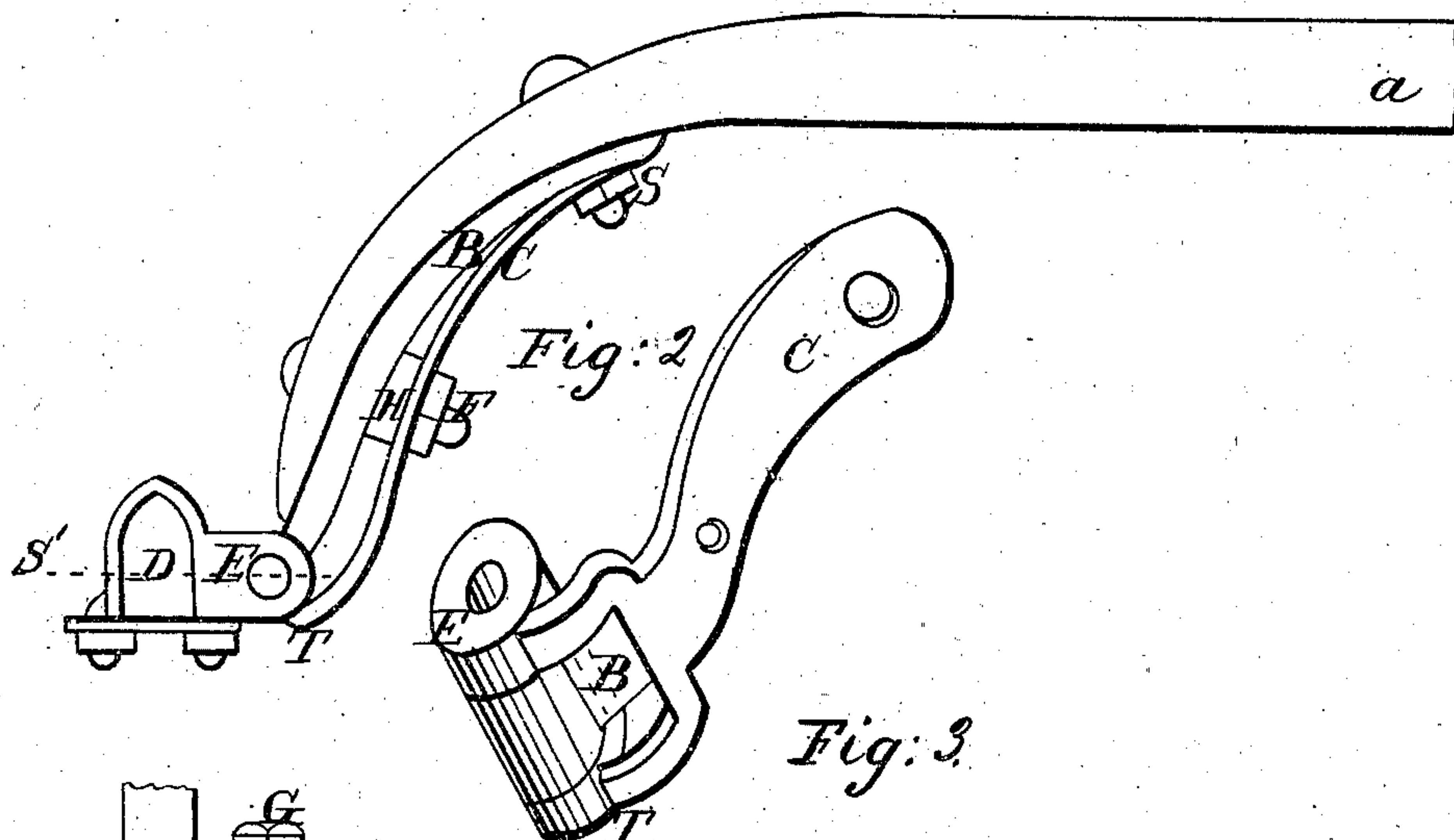


Fig: 3.

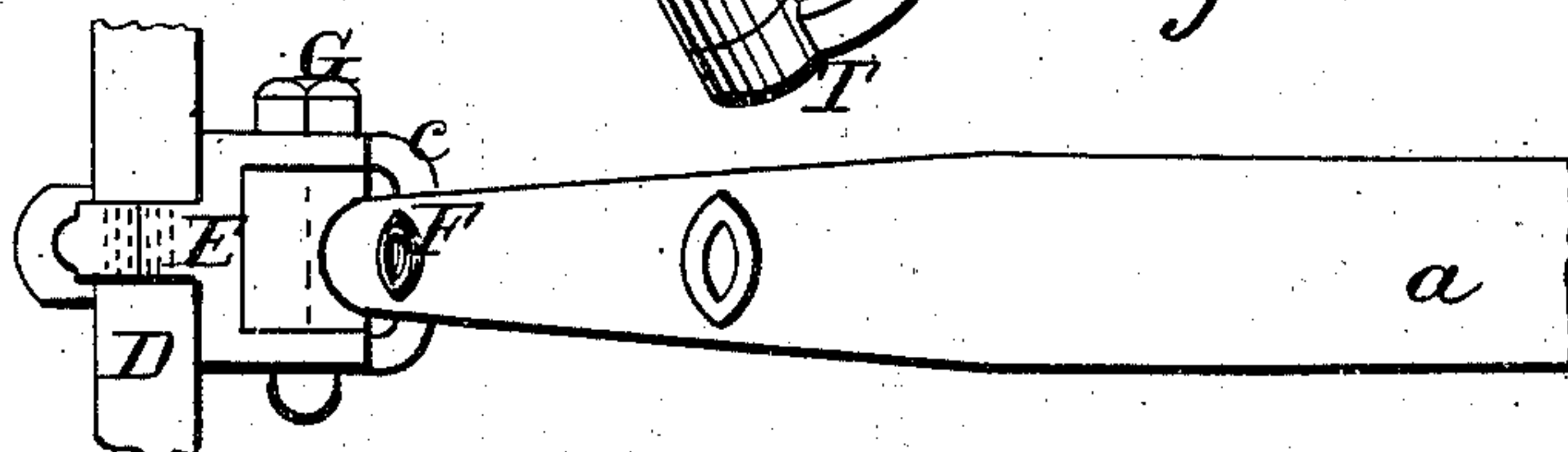
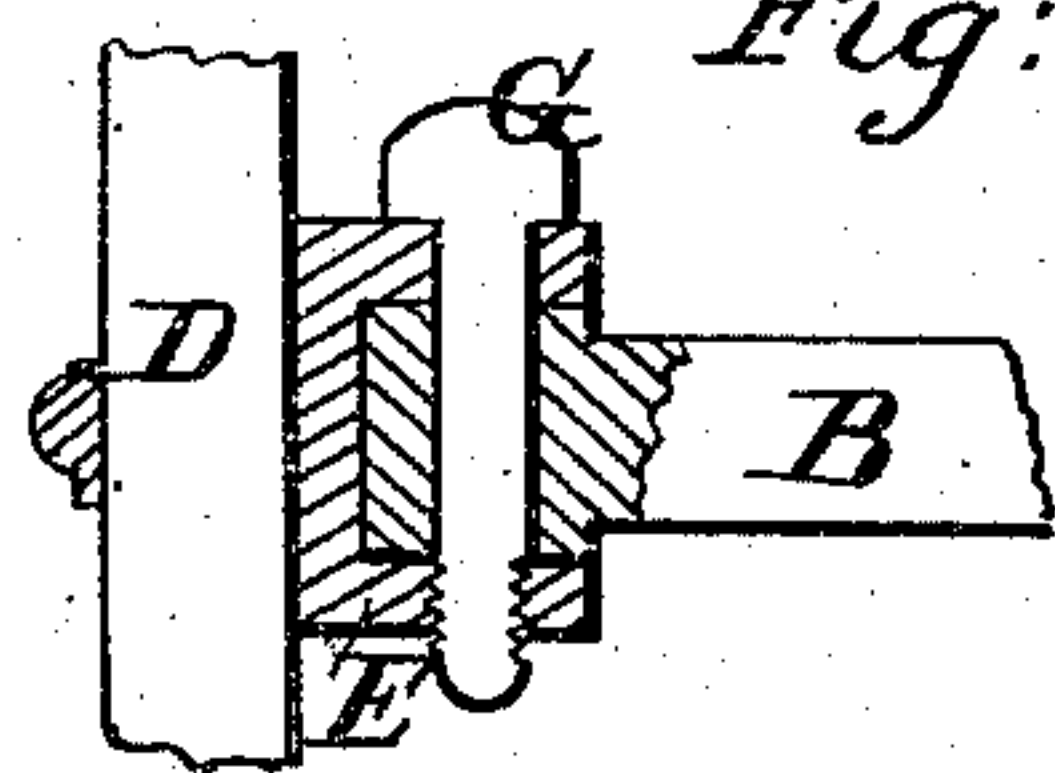


Fig: 4.



Witnesses:

W^m W. Sanborn.
B. B. Hart.

Inventor

Charles Boynton

United States Patent Office.

CHARLES BOYNTON, OF LYONS CITY, IOWA.

Letters Patent No. 66,784, dated July 16, 1867.

IMPROVEMENT IN ATTACHING THILLS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES BOYNTON, of Lyons City, in Clinton county, State of Iowa, have invented a new and useful Improvement in Attaching Thills or Poles to Carriages.

The object of my invention is to so attach the thills or pole of a carriage to the body of the same that in case of wear, or looseness from other causes, the joints may be tightened by the following-described device; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings and letters of reference marked thereon, all making a part of this specification, in which—

Figure 1 is a side elevation.

Figure 2 is a perspective view of the spring or rigid piece of metal.

Figure 3 is a top view of the attachment.

Figure 4 is a section on line S', fig. 1.

A represents the thill or pole; B the iron strap, with an eye to fit the clip; C represents a spring or rigid piece of metal, made to fit clip E at one end, the other end bolted fast to thill or pole; D represents the axle-tree; E represents the clip; F represents an adjustable bolt, fitted to increase the tension of the spring C or rigid piece of metal, or to slacken, as may be desirable; G, a bolt to fasten thill or pole iron to the clip E; H represents an elastic or adjustable packing between the spring C and the iron B.

Now, to enable others to fully understand my invention, I will carefully describe its construction and operation.

It is well known that in the ordinary attachment of poles and thills to carriages, from constant wear and other causes they become loose, and are a constant source of annoyance. In order to prevent this I construct a spring or rigid piece of metal of any suitable material. This I attach to the thill or pole iron, as shown in fig. 1, at S, C, and T, the end at S I bolt fast and firm, while at E it is adjustable by means of the packing H, and bolt F. I have the end at T fitted to the clip, as shown. Now the action of this spring or rigid piece keeps the thill or pole firmly in its place. I construct the packing H of rubber, or any other suitable material; this I fit between the spring C and iron B, and screw down the nut on bolt F tightly on to it. This prevents the spring from vibrating and wearing away. This device is applicable to thill-couplings of any size and form, and may be attached on the top or on under side, as shown. It can be fitted to a clip that is crotched or with a single eye. In the application to a clip with a single eye the spring would not be crotched, but straight.

What I claim as my invention, and desire to secure by Letters Patent, is—

The spring or rigid piece of metal, C, the packing H and the adjustable bolt F, when constructed, arranged and operating substantially as and for the purposes above set forth.

CHARLES BOYNTON.

Witnesses:

WM. W. SANBORN,

B. B. HART.