

B. F. HALDEMAN.
THILL COUPLING.

APPLICATION FILED MAR. 18, 1905.

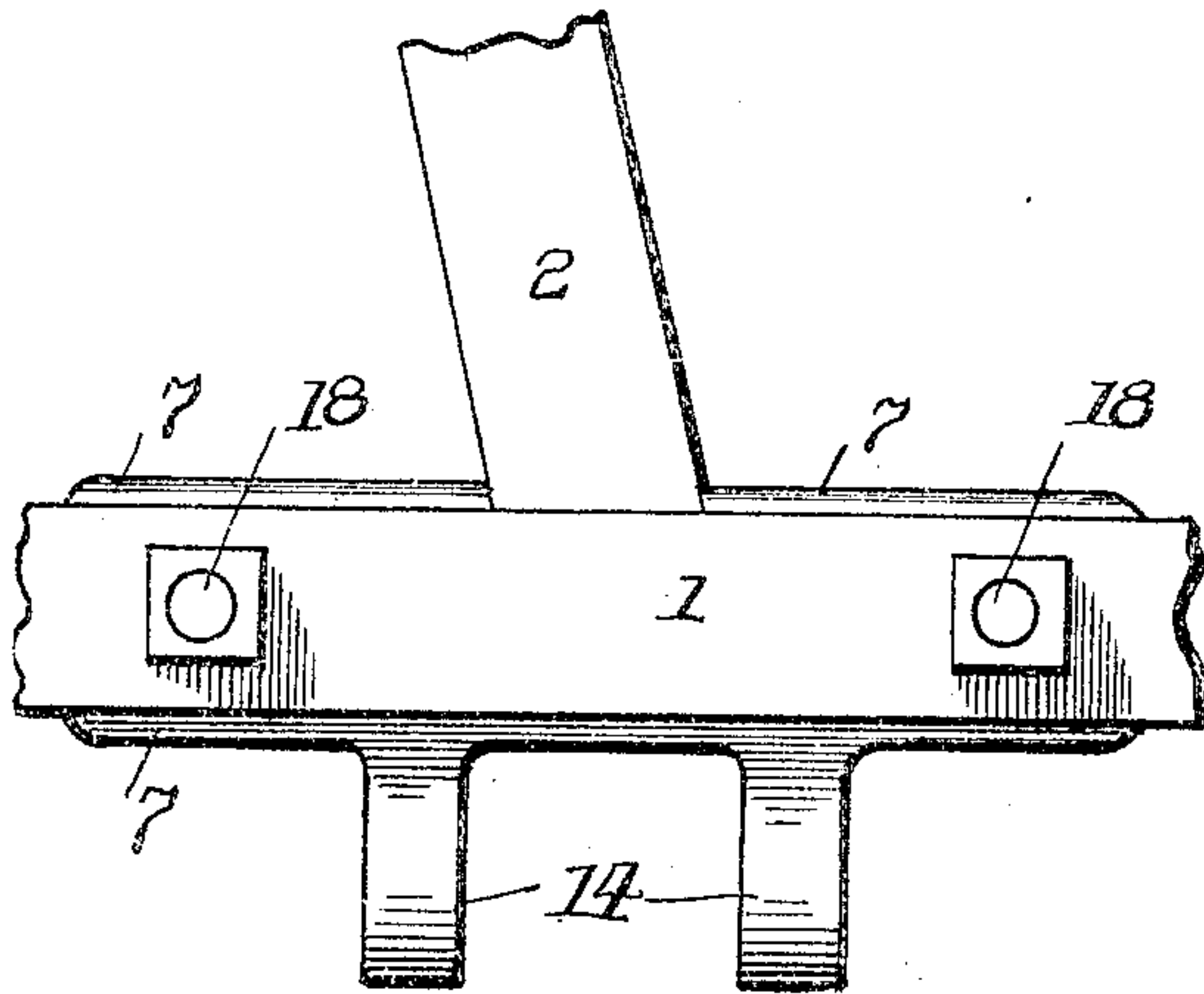


Fig. 1.

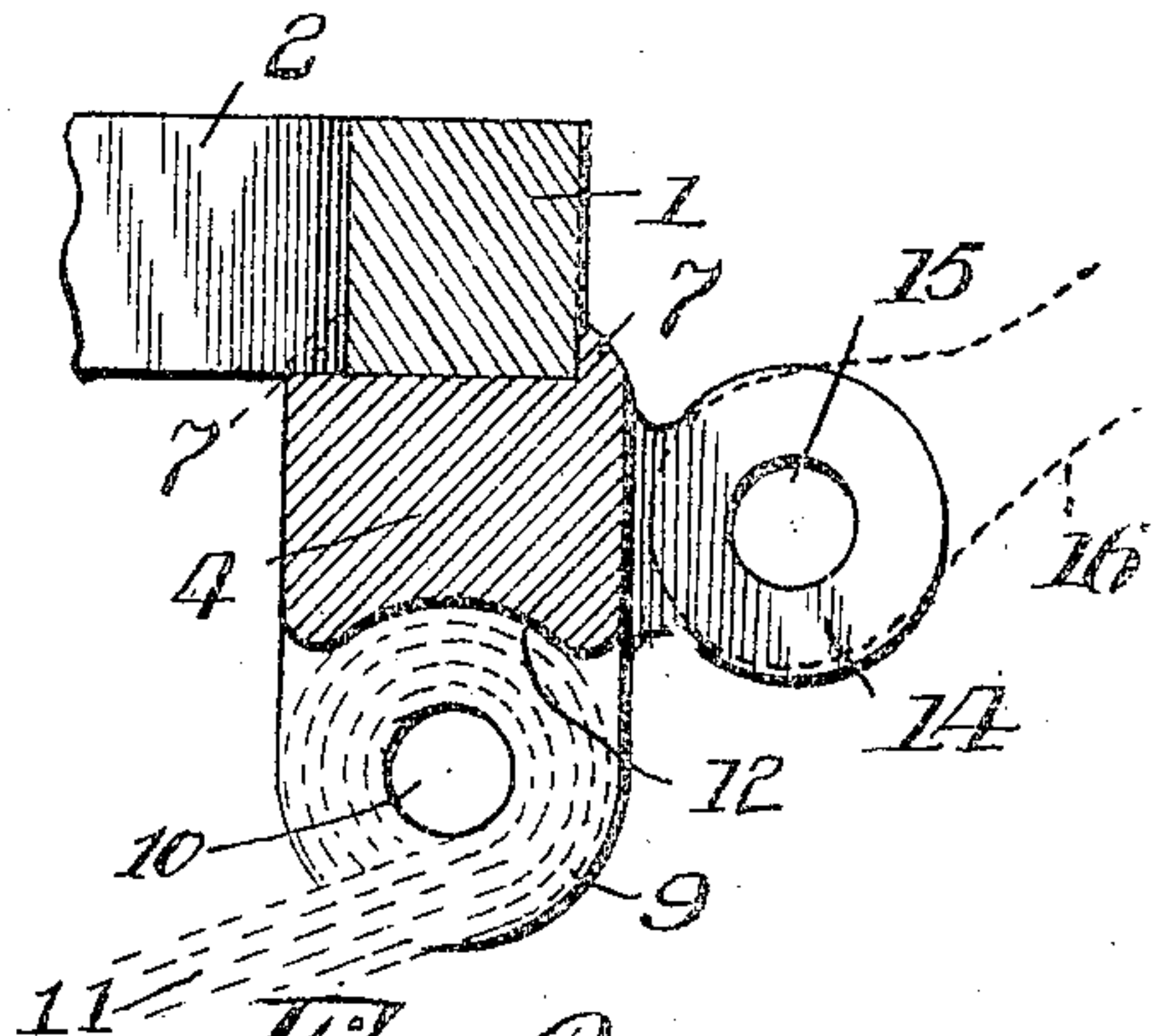


Fig. 2.

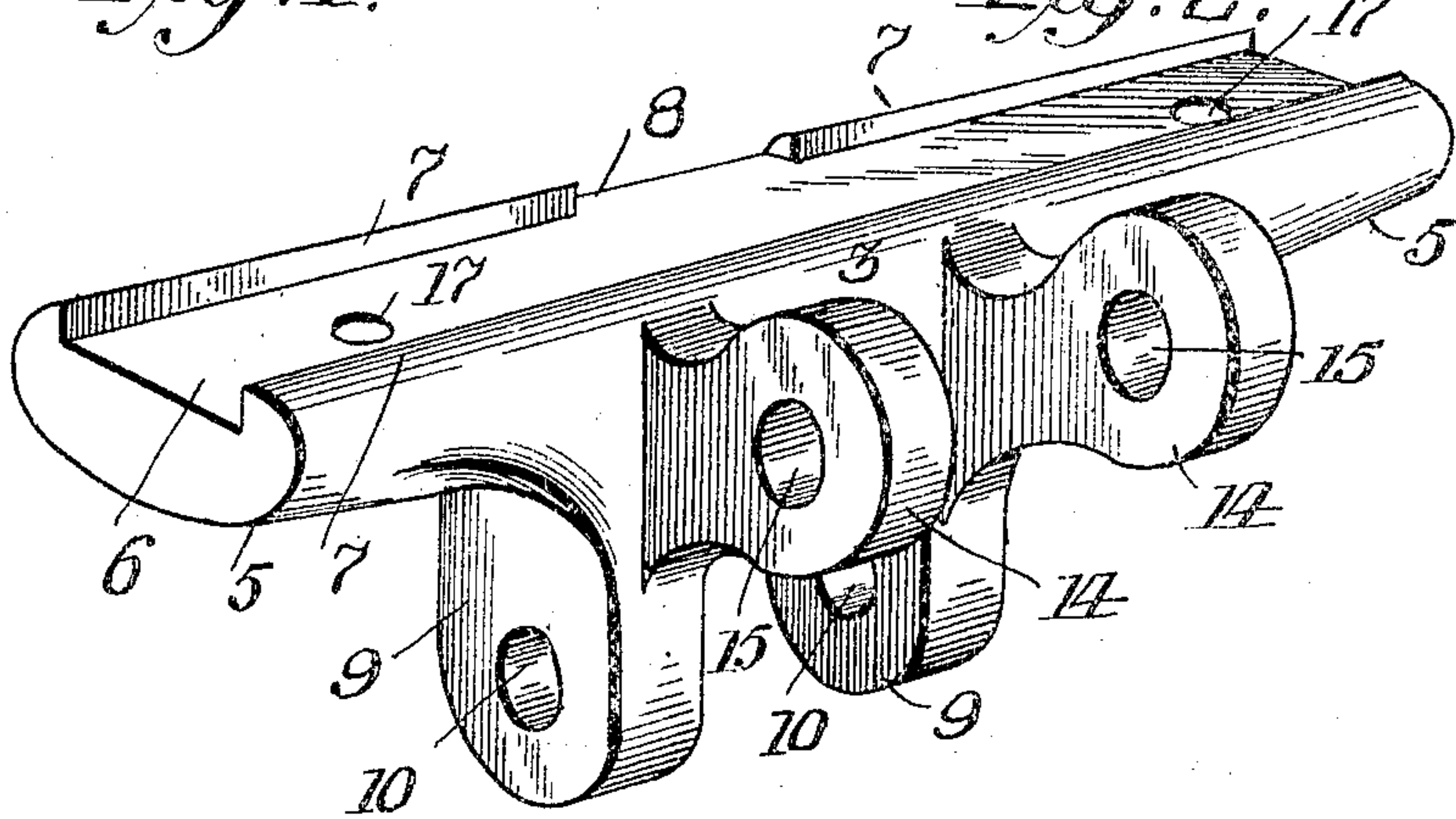


Fig. 3.

Witnesses:
J. H. Butler
E. E. Potter

Inventor
Benjamin F. Haldeeman.
By H. C. Everett & Co.
Attorneys.

UNITED STATES PATENT OFFICE.

BENJAMIN F. HALDEMAN, OF PITTSBURG, PENNSYLVANIA.

THILL-COUPLING.

No. 804,719.

Specification of Letters Patent.

Patented Nov. 14, 1905.

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To all whom it may concern:

Be it known that I, BENJAMIN F. HALDEMAN, a citizen of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Thill-Couplings, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in thill-couplings, and has for its object to combine a shackle with a thill-coupling, whereby a new article of manufacture is produced which can be easily and quickly positioned upon platform-gears and that part of vehicles wherein thill-couplings are employed.

20 The invention aims to dispense with the separate and independent pieces known as "spring-shackles" or "shaft-shackles" and to combine these separate pieces into a serviceable and extremely simple article of manufacture.

25 Hertofore spring and shaft shackles have been formed as separate pieces, and considerable trouble has been experienced in positioning and fastening the shackles to the platform-gears of vehicles. It has also been necessary in connection with platform-gears to employ T-plates to strengthen the side arms of a platform-gear, and in constructing my improved device I have formed the same to partially embrace the side arms of the platform-gear; also a bolster or piece to which it is secured. 35 I have employed the same fastening means heretofore used for securing shackles upon the gears and for dispensing with the number of fastening means employed, owing to the fact that the spring and shaft shackles of my improved device are formed integral.

40 The thill-coupling, together with the spring-shackle, while simple in construction, is strong and durable and comparatively inexpensive to manufacture and when supporting a spring is adapted to embrace the end of the spring and relieve to a certain extent the stress that may be exerted upon said spring.

50 With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, which will be hereinafter more fully described and then specifically pointed out in the claims, and, referring to the drawings accompanying this application, like numerals of reference

designate corresponding parts throughout the several views, in which—

Figure 1 is a top plan view of my improved thill-coupling, illustrating the same in position upon a bolster. Fig. 2 is a vertical sectional view of the same, and Fig. 3 is a perspective view of my improved thill-coupling.

60 In putting my invention into practice I have combined a spring-shackle and thill-coupling, or, as it is sometimes termed, a "shaft-shackle," to produce a new article of manufacture, which I have found by experiment and use to be practical and highly efficient for the purposes for which it is used.

70 To demonstrate the use of my improved coupling, I have illustrated the same in Figs. 1 and 2 of the drawings, as positioned upon a bolster 1, having a side arm 2. The coupling consists of an elongated body portion 3, having an enlarged central portion 4, which gradually tapers, as indicated at 5 5, to the ends of the coupling. The top face of the coupling is grooved, as indicated at 6, forming flanges 7 7. These flanges are adapted to embrace the edges of the bolster 1, and I have cut away one of said flanges, as indicated at 8, whereby said flange may embrace the side arm 2 of the platform-gear. I have not deemed it necessary to illustrate another platform-gear, as that portion illustrated in the accompanying drawings will be readily understood by those skilled in the art of vehicles.

85 The enlarged portion 4 of my improved coupling is provided with two depending lugs 9 9, having horizontally-arranged apertures 10 10, and these lugs are adapted to receive a pin (not shown) which retains the end of a spring 11 in position within said lugs. I have illustrated in Fig. 2 the end of a spring as positioned within my improved coupling, and it will be observed by referring to said figure that the face of the enlarged portion is concave, as indicated at 12, between the lugs 9 9, this concavity being adapted to embrace the end of the spring 11 and partially relieve the same of any strain and stress that may be exerted upon said spring.

100 The one side of the coupling is provided with outwardly-extending lugs 14 14, which are provided with horizontally-alined apertures 15 15, and in forming the lugs 14 14 I preferably position the same approximately in vertical alinement with the lugs 9 9. The lugs 14 14 are adapted to receive the end of a shaft

16, a suitable pin or bolt (not shown) being employed to secure the shaft within the lugs 14 14.

5 The tapering ends of the coupling are provided with apertures 17 17, and by means of suitable bolts and nuts 18 18 I secure my improved coupling to the bolster and side arm 2 of a platform-gear.

10 From the foregoing description, taken in connection with the drawings, it will be observed that I have formed a shaft and spring-shackle of one piece which can be quickly and easily secured to the bolsters of a vehicle. I do not care to confine myself to the position 15 of the shaft-shackle in relation to the spring-shackle nor to the contour of my improved coupling.

It will be noted that various other changes may be made in the details of construction 20 without departing from the general spirit and scope of the invention.

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

25 1. A coupling of the character described, comprising a body portion adapted to be secured to a bolster, depending pierced lugs adapted to receive the end of a spring and horizontally-extending pierced lugs adapted to receive the end of a shaft.

30 2. A coupling of the character described, comprising a body portion having flanges on its upper sides, adapted to embrace the sides of a bolster and having holes for the passage of bolts therethrough, said body portion being 35 formed with integral, depending, pierced lugs, said lugs being adapted to embrace the end of a spring and to receive a bolt by means of

which the spring is attached to the lugs, and said body being formed with integral forwardly-extending pierced lugs adapted to embrace the end of a shaft and to receive a bolt 40 for the attachment of said shaft.

3. A coupling of the character described, comprising a body portion adapted to be secured to the lower side of the bolster, said body 45 portion being formed with pierced depending lugs and with pierced horizontally-extending lugs, said lugs being adapted respectively for the attachment of a spring and of a shaft to said body portion. 50

4. A coupling of the character described, comprising a body portion adapted to be attached to the body of a bolster and depending 55 pierced lugs carried by said body portion and adapted to embrace the ends of a spring and to receive a bolt for holding said spring in position therebetween, said body portion being of concave form between said lugs.

5. In a coupling of the character described, the combination with a bolster, of a body portion 60 having apertures formed therein, flanges carried by said body portion and adapted to engage said bolster, shaft-shackle lugs carried by said body portion, spring-shackle lugs carried by said body portion, said body portion 65 having a concavity formed therein between the last-named lugs, substantially as described.

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

BENJAMIN F. HALDEMAN.

Witnesses:

E. E. POTTER,
K. H. BUTLER.