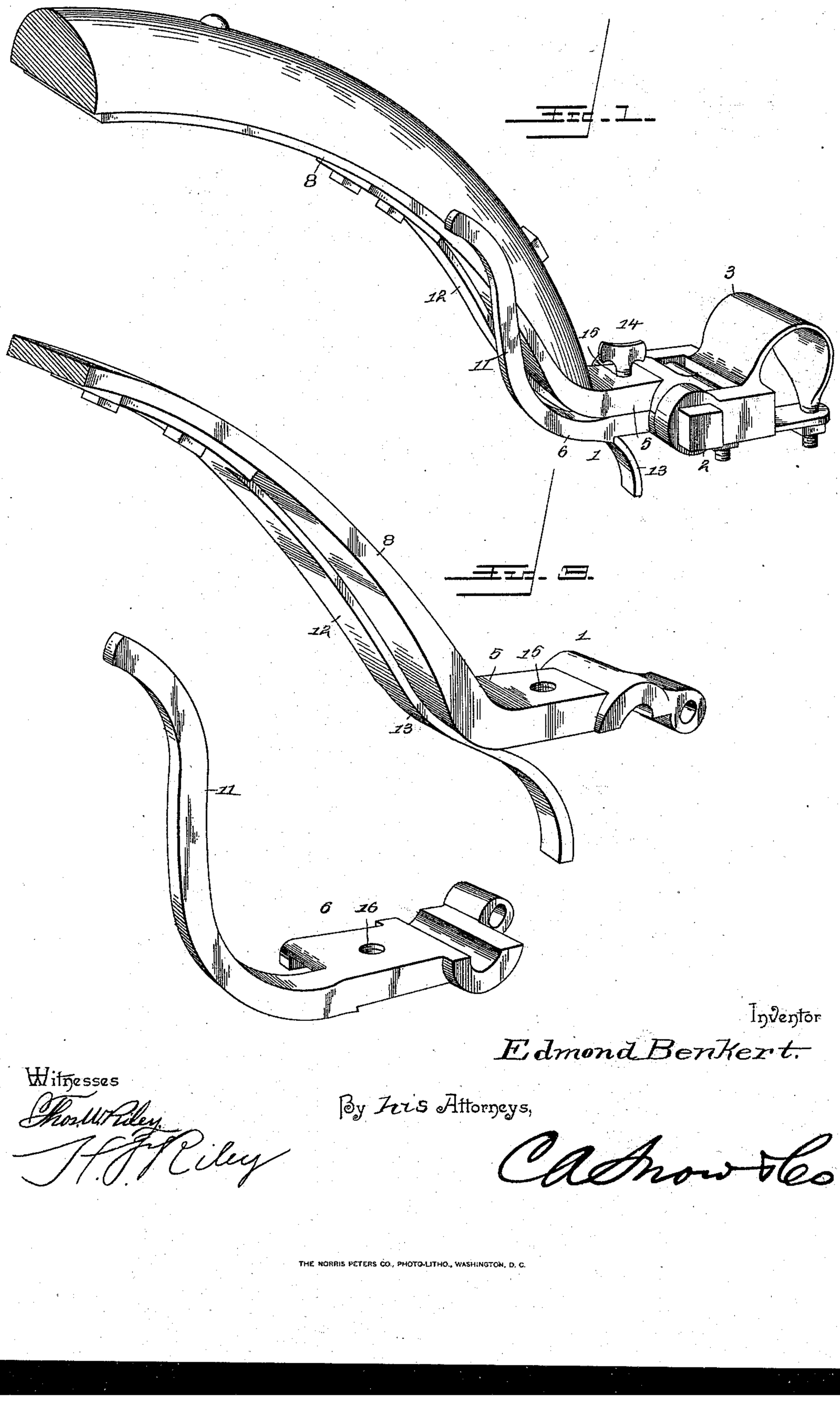
(No Model.) 2 Sheets—Sheet 1.

E. BENKERT.

COUPLING FOR SHAFTS OR POLES.

No. 568,062. Patented Sept. 22, 1896.



Inventor

Edmond Benkert.

Witnesses

Thos. W. Riley.

T. F. J. Riley

By his Attorneys,

C. A. Snow & Co.

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Fig. 2.

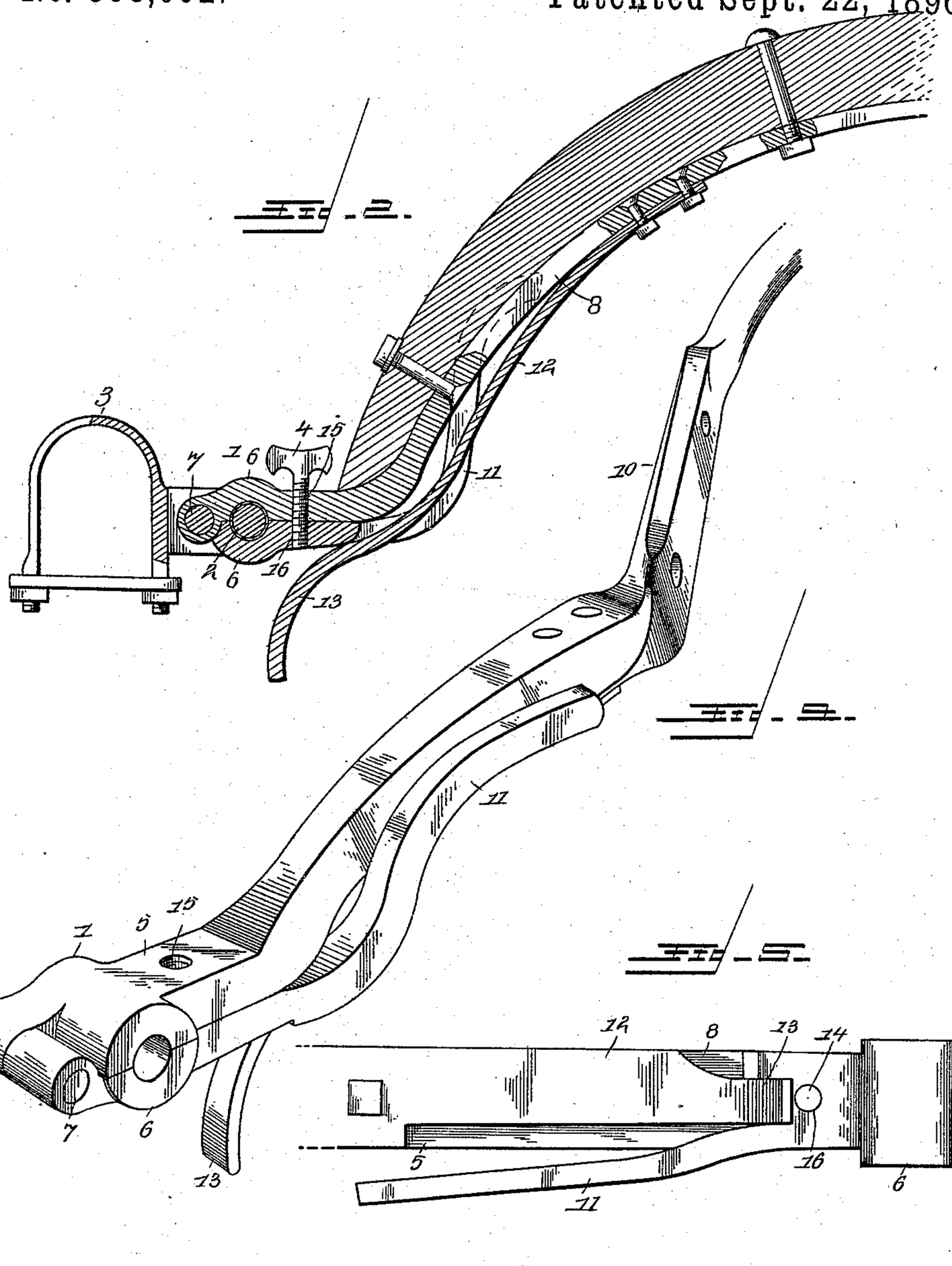

Fig. 1.

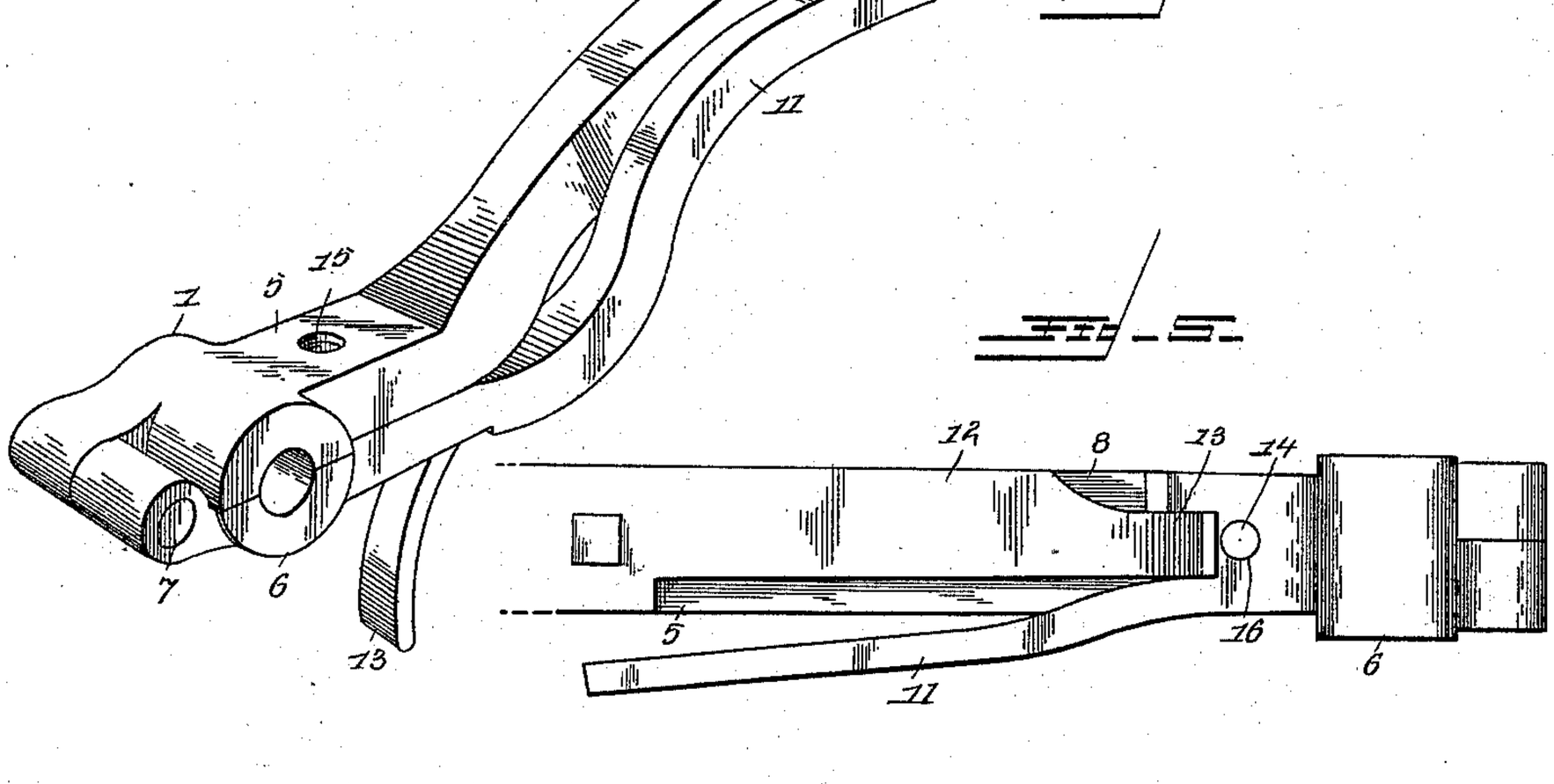

Fig. 5.

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UNITED STATES PATENT OFFICE.

EDMOND BENKERT, OF JASPER, INDIANA.

COUPLING FOR SHAFTS OR POLES.

SPECIFICATION forming part of Letters Patent No. 568,062, dated September 22, 1896.

Application filed January 17, 1896. Serial No. 575,862. (No model.)

To all whom it may concern:

Be it known that I, EDMOND BENKERT, a citizen of the United States, residing at Jasper, in the county of Dubois and State of Indiana, have invented a new and useful Coupling for Shafts or Poles, of which the following is a specification.

The invention relates to improvements in couplings for shafts and poles.

The object of the present invention is to improve the construction of couplings for shafts and poles and to provide a simple and inexpensive coupling which may be readily applied to shafts and poles, and which will enable a pole or shaft to be readily connected to and disconnected from a vehicle, and which will also enable a shaft or a pole to be employed on any ordinary vehicle.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a coupling constructed in accordance with this invention and shown applied to a shaft. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the sectional eye, the parts being separated. Fig. 4 is a perspective view of a coupling constructed in accordance with this invention and adapted to be applied to a pole. Fig. 5 is a reverse plan view of the same.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a sectional eye receiving a coupling-bolt 2, which is disposed transversely of an axle or thill-coupling 3 of the ordinary construction. The axle or thill-coupling consists of an axle-clip provided with forwardly-extending ears perforated for the reception of the coupling-bolt. The eye 1 is composed of sections 5 and 6, hinged at their rear ends by a transverse pivot or pintle 7, and provided with opposite grooves forming an eye for the reception of the coupling-bolt 2, and arranged between the perforated ears in the usual manner. The upper section 5 is extended to form a shank 8, which may be curved and secured to the lower face of the fill 9, similar to the ordinary thill-iron, and which may be extended, as illustrated in Figs. 4 and 5 of the accompanying drawings, to provide an attachment plate or portion 10, whereby the sectional eye is adapted to be connected with a pole similar to the ordinary eyes.

The lower section 6 is extended and curved at one side to form a handle 11, and it is provided adjacent to the inner end of the handle with a recess or notch and is engaged at that point when closed by a resilient catch 12. The resilient catch 12 consists of a spring secured at its front end to the lower face of the shank of the upper section, and having its rear portion reduced in width and curved at 13, and arranged to engage the lower section to confine the latter in its closed position. The rear end of the spring or resilient catch is arranged to engage the lower section automatically when the latter is closed, and is adapted to similarly release the lower section when the latter is opened. This spring is of sufficient strength to retain the sections in their closed position and to prevent any liability of their becoming accidentally separated or opened through the motion of the vehicle.

In order to lock the sections absolutely against any accidental opening, a screw 14 is employed and is arranged in threaded perforations 15 and 16 of the sections of the eye, and are located slightly in advance of the eye proper. The screw engages the threaded openings of both sections and forms an absolute lock against any accidental springing, and when it is desired to open the sectional eye to permit a pair of thills to be detached from the vehicle the screw is withdrawn sufficiently to disengage it from the lower or outwardly-swinging section to release the same. The handle will then enable the operator to readily disengage the lower section from the spring.

In the drawings sectional eyes are shown for both thills and poles, but it will be readily apparent that the only difference resides in the particular form of the shank of the upper section.

The eye proper is designed to be lined with some suitable material to prevent any noise and rattling.

It will be seen that the sectional eye of the coupling is exceedingly simple and inexpensive in construction; that it possesses great strength and durability, and that it will enable a pair of thills or poles to be readily attached to or removed from a vehicle, and will also enable a vehicle to be readily supplied with a pole or thills.

Changes in the form, proportions, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

What I claim is—

1. In a device of the class described, the combination with an axle-clip provided with ears and having a coupling-bolt, of an eye receiving the coupling-bolt and composed of upper and lower sections hinged at their rear ends, the upper section being adapted to be applied to a pole or a thill, and a resilient catch rigidly secured to the upper section and arranged to engage the lower section automatically when the same is closed, substantially as described.

2. In a device of the class described, the combination with an axle-clip provided with ears and having a coupling-bolt, of an eye composed of upper and lower sections hinged at their rear ends, the upper section being adapted to be applied to a pole or a thill, and the lower section being provided with a recess and having a forwardly-extending handle, and a resilient catch rigidly secured at its front end to the upper section and having its rear end curved and arranged to be engaged automatically by the lower section at the recess thereof when the said lower section is closed, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EDMOND BENKERT.

Witnesses:

ROBERT S. NORMAN,

ISAAC L. HARDIN.