No. 743,870. PATENTED NOV. 10, 1903.

R. B. HINTON.

COUPLING.

APPLICATION FILED JULY 11, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

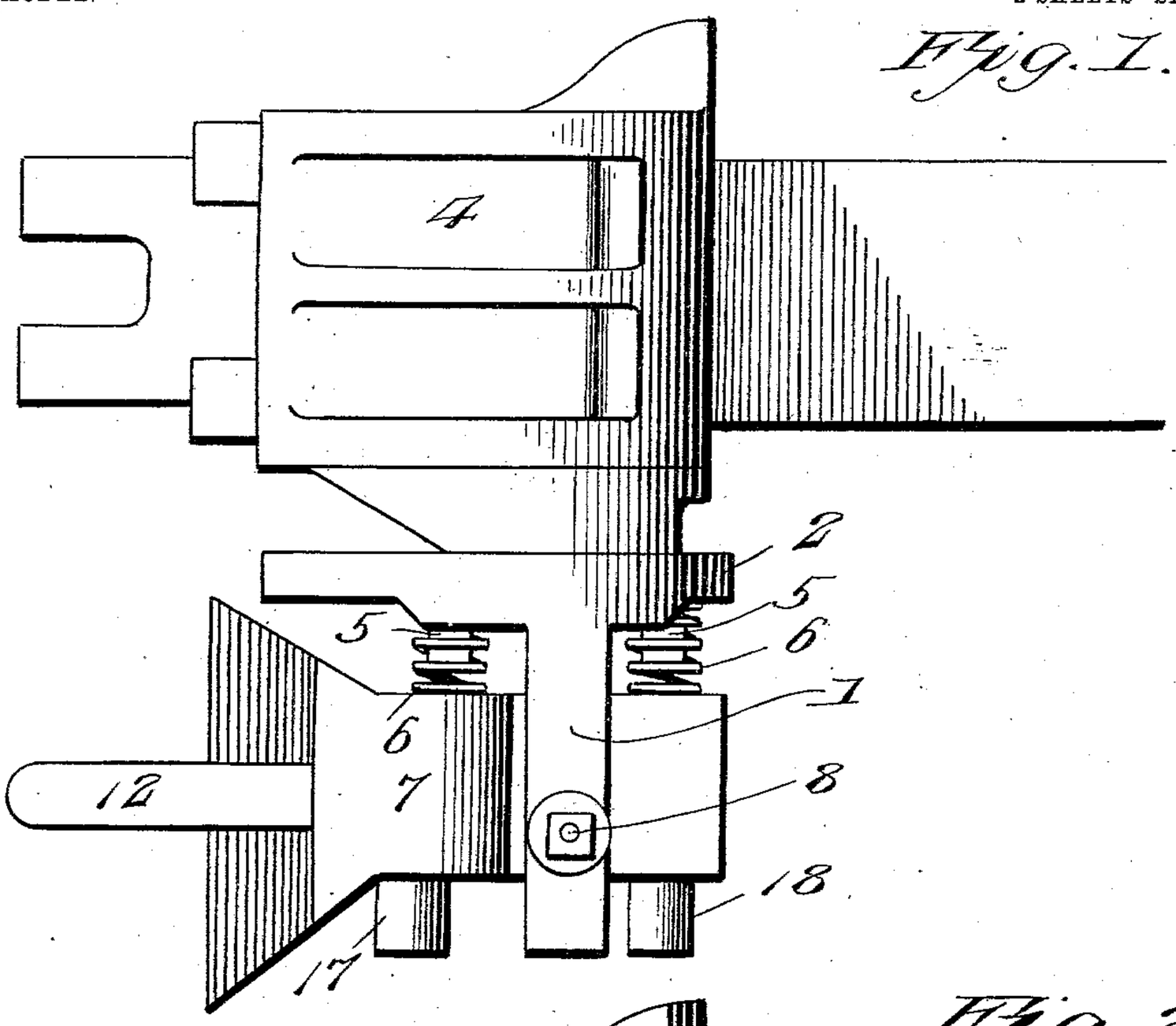
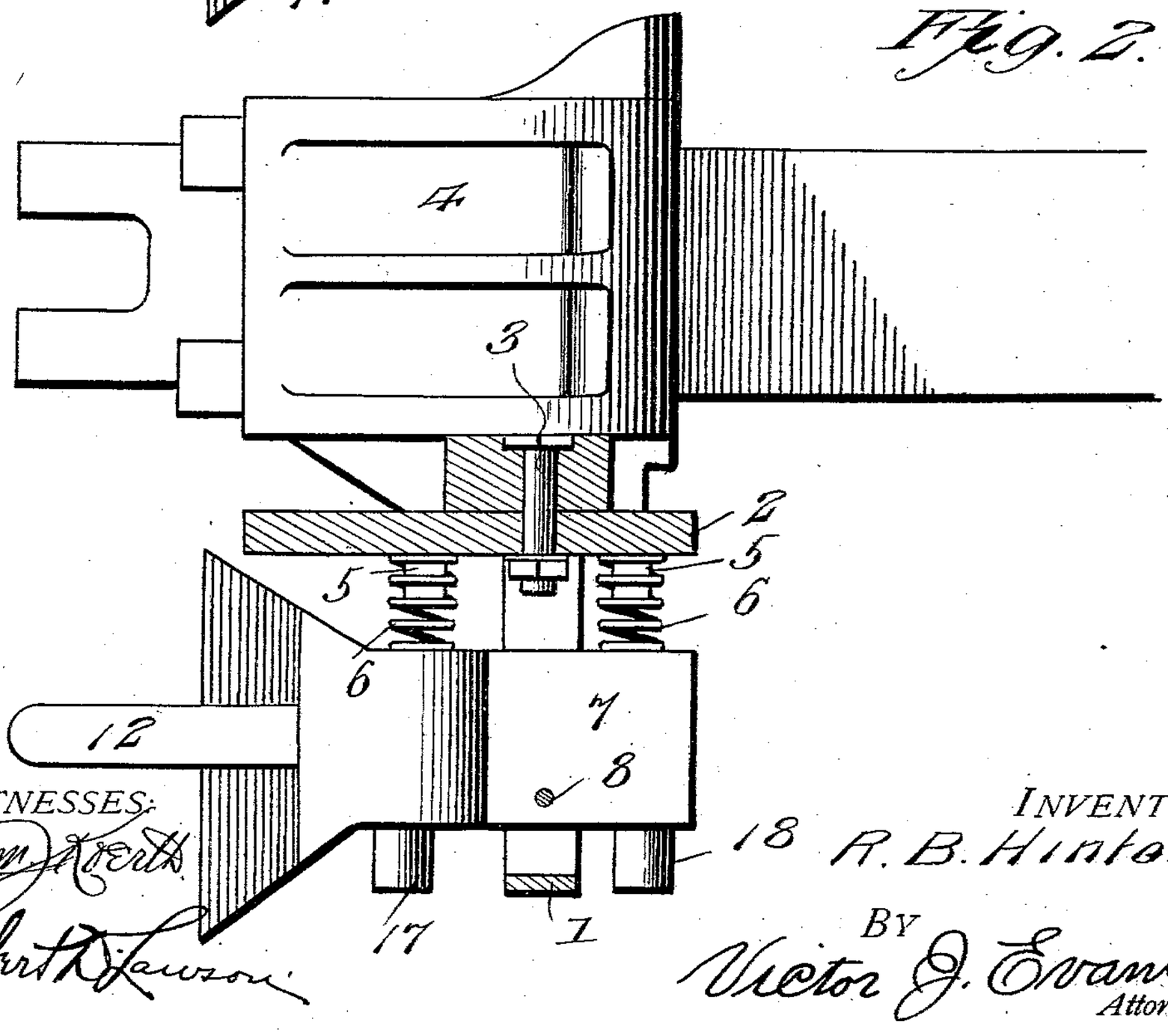


Fig. 2.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3

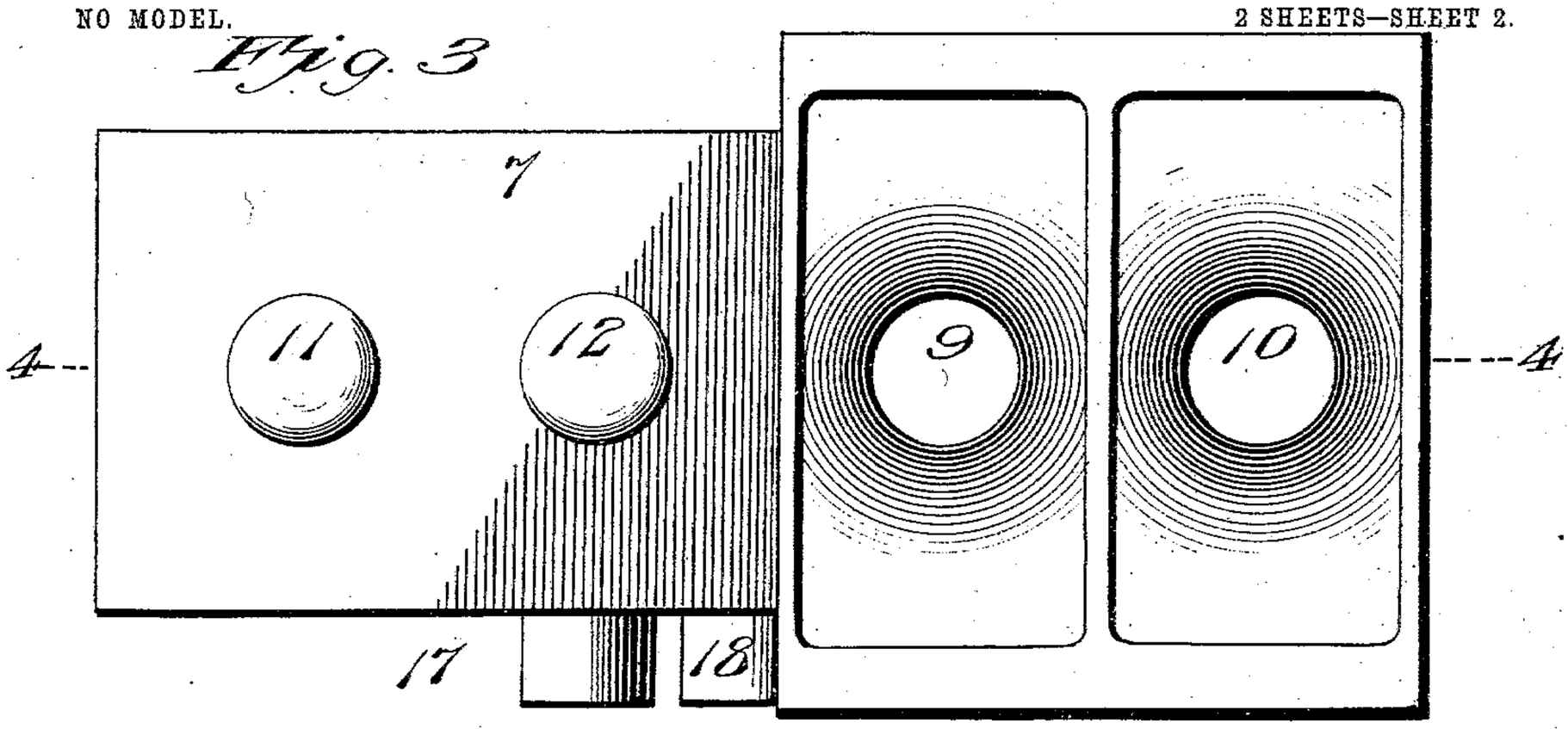
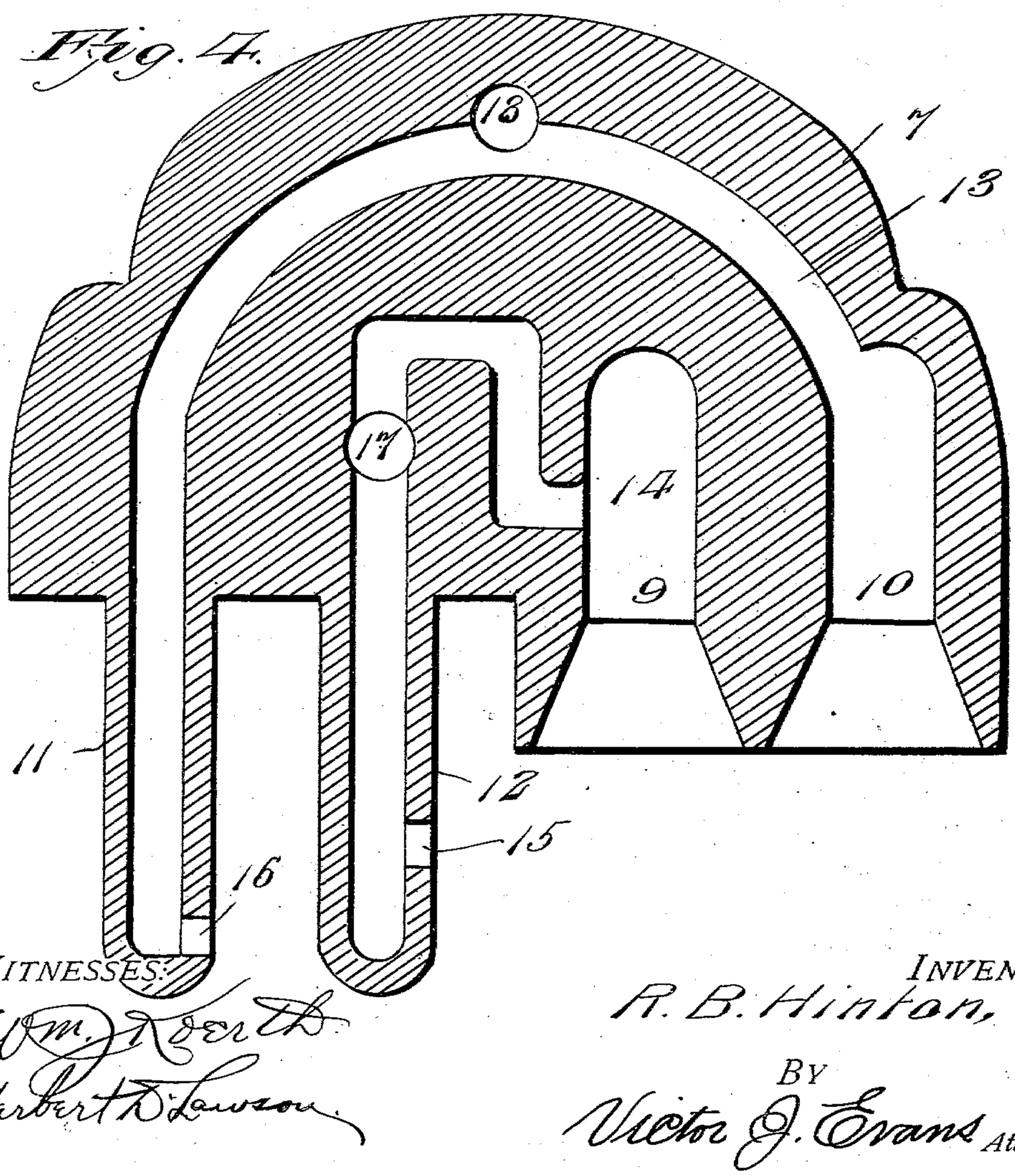


Fig. 4.



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No. 743,870. Patented November 10, 1903.

UNITED STATES PATENT OFFICE.

ROGGER BELL HINTON, OF NORTH BIRMINGHAM, ALABAMA.

COUPLING.

SPECIFICATION forming part of Letters Patent No. 743,870, dated November 10, 1903.

Application filed July 11, 1903. Serial No. 165,135. (No model.)

To all whom it may concern:

Be it known that I, ROGGER BELL HINTON, a citizen of the United States, residing at North Birmingham, in the county of Jefferson and State of Alabama, have invented new and useful Improvements in Couplers, of which the following is a specification.

My invention relates to new and useful improvements in couplers for air-brakes; and its object is to provide a coupler of simple and durable construction which can be attached to the draw-head of the ordinary car-coupler and which is provided with mechanism whereby the same may be rocked to compensate for any uneven movement of the coupled car.

The invention consists in providing a supporting-yoke adapted to be secured to the bottom of the draw-head of a coupler, and pivotally mounted upon the transversely-extending pin arranged in this yoke is the draw-head of the air-coupler. This draw-head has a semicircular passage therein, one end of which opens into a socket, while the other end opens through a tubular arm equal in area to the area of the socket before mentioned and at the same distance from the center of the draw-head as said socket. Another socket is arranged within the draw-head and is connected by a passage with a tubular arm similar to the arm before mentioned, and this arm and the socket communicating therewith are of substantially the same area. Springs are interposed between the yoke and the draw-head of the air-brake coupler for the purpose of holding the same normally in a horizontal position.

The invention also consists in the further novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a side elevation showing my improved air-brake coupler attached to the draw-head of a car-coupler. Fig. 2 is a similar view showing the yoke in section. Fig. 3 is a front elevation of the draw-head of the air-brake coupler; and Fig. 4 is a section on line 4 4, Fig. 3.

Referring to the figures by numerals of reference, 1 is a yoke formed integral with a disk 2, which is pivotally mounted upon a bolt 3, fastened to the draw-head 4 of a car-coupler. Lugs 5 extend downward from the disk 2 and are inclosed by coil-springs 6, the lower ends of which bear upon the draw-head 7 of an air-brake coupler, which is mounted upon a pivot-pin 8, extending transversely of the yoke 1 and secured therein in any suitable manner. This draw-head is preferably formed in a single casting, and parallel sockets 9 and 10 are formed in the front face thereof at one side of the center, while parallel tubular arms 11 and 12 extend from the front face at the other side of the center of the coupler. The area of these arms is substantially the same as the area of the sockets 9 and 10. A substantially semicircular passage 13 connects the inner end of the socket 10 with the interior of the arm 11, and a passage 14 communicates at opposite ends with socket 9 and the interior of arm 12. An aperture 15 is formed in the arm 12 at a point from the end thereof equal to the distance from the inner end of socket 9 to the passage 14, and an aperture 16 is formed in the end of the arm 11. Tubular extensions 17 and 18 extend from the lower face of the draw-head, and one of these extensions communicates with the passage 13, while the other extension, 17, opens into passage 14. The air-conducting tubes of the air-brake are adapted to be fastened to these two extensions.

In view of the peculiar construction of the draw-head herein described it is obvious that when two similar draw-heads are brought together the tubular arms 11 and 12 thereof will project into the oppositely-arranged sockets 9 and 10, and a circulation of air can thus be established from the extension 18 of one draw-head to the extension 18 of the other through the passages 13, tubular arms 11, and sockets 10, and at the same time communication is established between the extensions 17 through the passage 14, arm 12, and sockets 9. The outer ends of the sockets 9 and 10 are enlarged, as shown in Figs. 3 and 4, so as to automatically project the ends of the arms 11 and 12 into the sockets when two draw-heads are brought together. The springs 6 serve to hold the draw-head 7 nor-

mally in a horizontal position and at the same time to have a slight movement upon its pivot 8.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

Having thus described the invention, what is claimed as new is—

1. A draw-head of the character described formed in a single casting having parallel tubular arms extending from the front face thereof at one side of the center of the draw-head and having outlets, said draw-head being provided in its front face at the other side of its center with sockets substantially equal in area to the area of the arms and communicating with the interior of the arms through independent passages, each of said passages having an inlet.

2. A draw-head of the character described formed in a single casting and having integral parallel tubular arms extending therefrom at one side of the center, said casting having parallel sockets in its front face at the other side of the center, said sockets being provided with enlarged outer ends and communicating with the interior of the arms through independent passages, each passage having an inlet.

3. The combination with a draw-head of a car-coupler; of a yoke pivotally connected thereto, a draw-head pivotally mounted within the yoke, springs interposed between the draw-head and yoke at opposite sides of the pivot of the draw-head, said draw-head being formed in a single casting and having parallel tubular arms at one side of the center of the front face thereof and provided with outlets, sockets being within the draw-head at the other side of its center and communicating through independent passages with the interior of the arms, each of said passages having an inlet.

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

ROGGER BELL HINTON.

Witnesses:

F. S. WILSON,

J. M. HEATON.