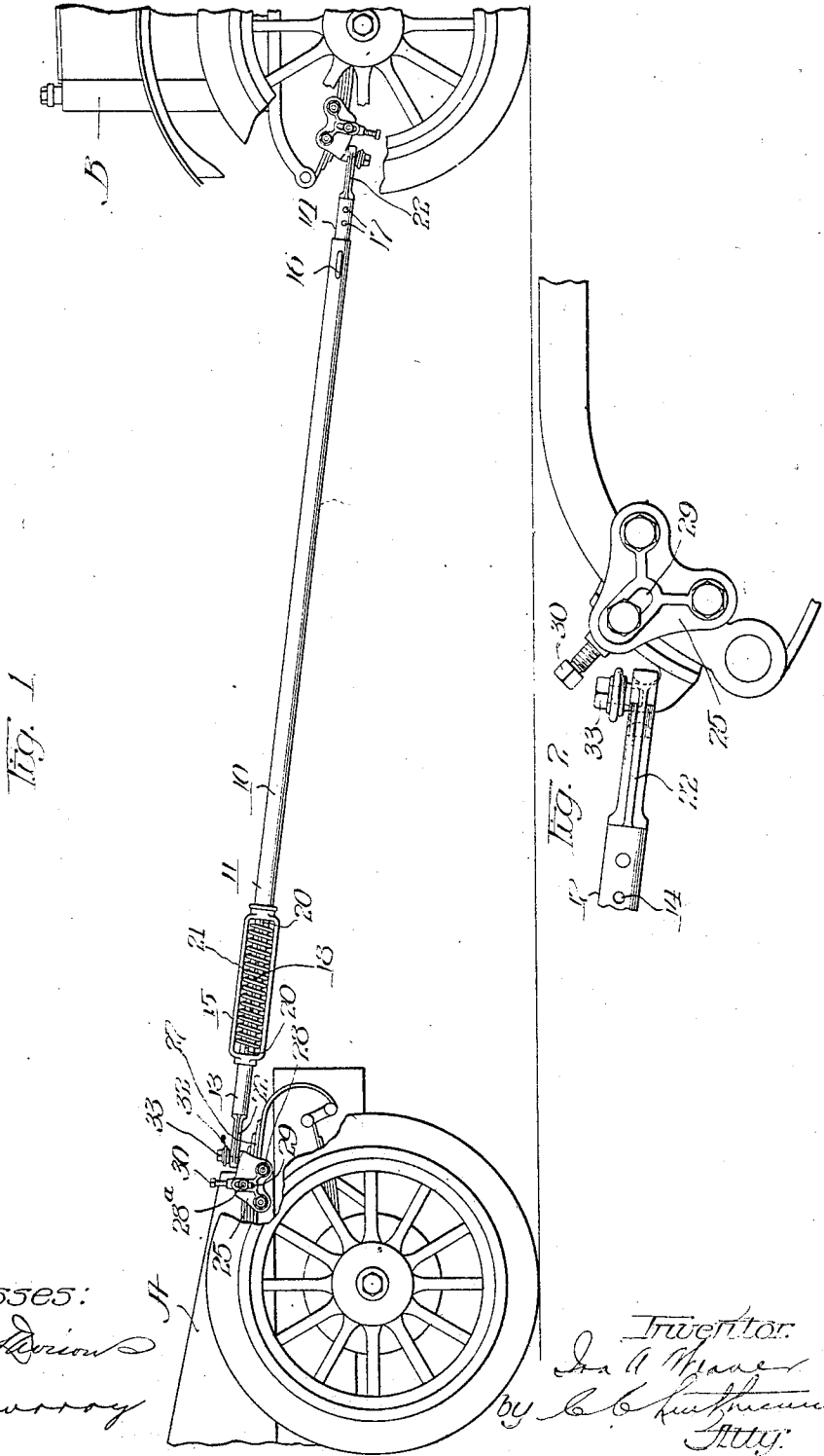


1,290,813.

Patented Jan. 7, 1919.
2 SHEETS—SHEET 1.



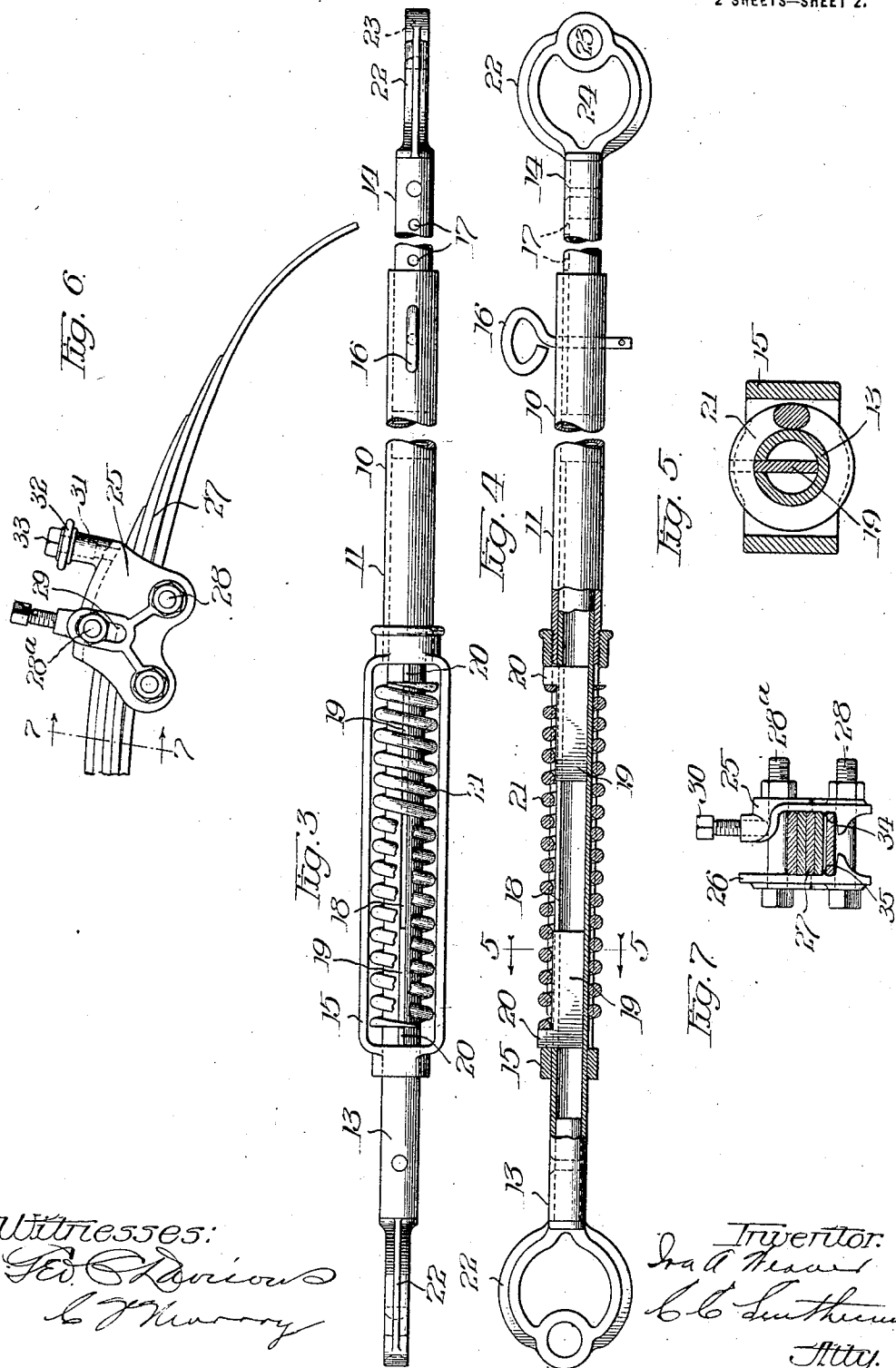
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Att'y.

1,290,813.

I. A. WEAVER.
TOWING POLE.
APPLICATION FILED JULY 19, 1915.

Patented Jan. 7, 1919.
2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

IRA A. WEAVER, OF SPRINGFIELD, ILLINOIS, ASSIGNOR TO WEAVER MANUFACTURING CO., OF SPRINGFIELD, ILLINOIS, A CORPORATION OF ILLINOIS.

TOWING-POLE.

1,290,813.

Specification of Letters Patent.

Patented Jan. 7, 1919.

Application filed July 19, 1915. Serial No. 40,570.

To all whom it may concern:

Be it known that I, IRA A. WEAVER, a citizen of the United States, and resident of Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Towing-Poles, of which the following is a specification.

My invention relates to towing means for automobiles and has particular reference to a novel construction of a towing pole.

It is common practice to employ a rope or cable for towing disabled automobiles, but there are many objections to the use of a flexible connecting element, particularly in a city where traffic is more or less congested. If a short towing element is employed, the towed machine is likely to collide with the rear of the machine in front. If the towing element be long, pedestrians are likely to attempt to pass between the two machines and be injured by tripping on the cable. Furthermore, in the use of a flexible towing element the connected machines are subject to considerable shock, due to the fact that their speed of travel can not be uniform. This results in jerking and the frequent breakage of the towing rope or of the parts of the machines to which the rope is connected. I have conceived the idea of employing a substantially rigid connection between the adjacent machines to the end that the shocks occasioned by the use of a flexible element may be eliminated. I have constructed a device with provision for limited relative movement of the parts and have provided a cushion element therebetween, thus eliminating all shocks of starting and stopping. The advantage in the use of a device of this sort is in that a disabled machine sometimes has its brakes impaired or destroyed. If a flexible towing element be used, it then becomes necessary to provide a third machine at the rear of the disabled machine. By the use of my novel device a machine without brakes may be towed with ease.

My invention also contemplates the employment of novel attaching devices between the pole and the machines to which it is connected.

Other objects will be apparent to those skilled in the art by reference to the accompanying drawings, in which like numbers indicate like parts in all the figures.

Figure 1 shows the preferred form of tow-

ing pole as applied to two automobiles and also shows the application of the attaching clamp;

Fig. 2 shows the attaching clamp as applied to the front end of the automobile frame;

Fig. 3 is a top view showing the assembly of the several parts of the pole. The spring is partially cut away to show a slot;

Fig. 4 is a side view, partially in section, showing the eyes at each end of the pole, the telescoping portions, and means for connecting the same;

Fig. 5 is a section on the line 5—5 of Fig. 4;

Fig. 6 is a view of a fragmentary portion of a spring with the clamp fastened thereon, and

Fig. 7 is a section on the line 7—7 of Fig. 6 showing a means of fastening the clamp to the spring.

In the preferred embodiment of my invention as illustrated in the drawings, I have shown the pole as composed of three sections, 11, 13 and 14, of tubular form. Members 13 and 14 are adapted to telescope within the member 11. Fastened to one end of the body 11 is a yoke 15, the portion 13 being slidably mounted in the other end of yoke 15. Member 14 is connected to body 11 by means of a pin 16. Said member 14 is provided with several apertures 17 to adjust same inwardly or outwardly of the end of body 11.

Referring to Fig. 4, it will be seen the member 13 extends into body 11 beyond the connection between said body 11 and yoke 15. A slot 18 is provided in member 13, as best seen in Fig. 3. A coil spring 21 is placed around member 13 within yoke 15. L-shaped keys 19 are placed in said member 13 so that they rest on the bottom thereof and extend through slot 18. Projections 20 extend upwardly and are adapted to bear against the inside ends of yoke 15 and the ends of spring 21. The keys 19 are of sufficient length to extend under several coils of spring 21.

Loops 22 are provided at the outer ends of members 13 and 14 and are provided with two openings 23 and 24.

The preferred form of clamp is best shown in Figs. 2, 6 and 7 and comprises side members 25 and 26 held together on spring 27 by bolts 28 and 28^a. Bolts 28^a are mounted in a slot 29 in the sides 25 and 26 to permit

the clamps being applied to springs of different size and also to parts of the frame. A set screw 30 is provided and is adapted to bear against bolt 28^a to hold the same firmly against the top of the spring 27. An up-
 5 standing boss 31 is integral with, or attached to, one of the side pieces of the clamp. In the drawings it is integral with side 25. The loops 22 of the pole 10 are hooked over
 10 the bosses 31 after the clamps have been secured to the automobile and form the pulling grips. The eye 23 is adapted to fit over boss 31 and held thereon by washer 32 and screw cap 33. It will be noted that each of the side
 15 pieces 25, 26 is provided with a pointed lateral projection 34, 35, adapted to engage between the two lower leaves of the spring and to wedge the same apart slightly. This assists in holding the clamp in position, giving
 20 a certain resiliency to the clamping action of the said bolt 30. The action of these projections on the springs is well illustrated in Fig. 6.

If not desired to attach the clamps to some part of the automobile, the pole 10 may be
 25 fastened by ropes through the eyes 24 of the loops 22.

The operation of the towing pole is as follows: Machine B, being disabled, is to be
 30 towed to some shop for repairs. A represents the automobile which will tow B. Having applied the clamps and attached the pole 10 thereto on bosses 31, machine A is started. Member 13 is moved, thus moving
 35 the key 19 at the farther end of the yoke in the slot 18, thus compressing spring 21. This imparts motion to yoke 15 and consequently through body 11, pin 16 to member 14, which is attached to machine B, thereby
 40 starting B without jerking. When stopping, the reverse action occurs in spring 21 any key 19, thus eliminating shock. Also in descending hills the jars will be cushioned by the spring 21.

I do not limit my invention to the exact 45 structure disclosed and described, but consider any substantially rigid connection provided with cushioning means and means for attachment to any part of a vehicle or vehicles and further provided with means for in-
 50 creasing or decreasing the length of said pole as coming within the spirit and scope of my invention.

I claim:

1. In an attaching device for towing 55 means, the combination of side sections having apertures, one of which is in the form of a slot, screw means located in said apertures and adapted to clamp said side sections onto a portion of an automobile, and additional
 60 screw means acting upon the screw means in said slotted aperture, substantially as described.

2. In an attaching device, the combination of side members, each thereof having a plu- 65 rality of apertures, one of said apertures being in the form of a slot, bolts engaging said side members through said apertures, and an additional bolt occupying said slotted aperture, substantially as described. 70

3. A unitary towing device, comprising in combination two tubular members in end-to- end relation, a third tubular member within which the ends of said first two tubular mem- 75 bers telescope, a shock-absorbing spring carried by one of said tubular members, and a removable pin connecting said third tubular member and one of said first mentioned tubular members, said pin providing for relative longitudinal adjustment of said 80 tubular members.

Signed at Springfield, Illinois, this 15th day of July, 1915.

IRA A. WEAVER.

Witnesses:

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 F. H. OFFER.