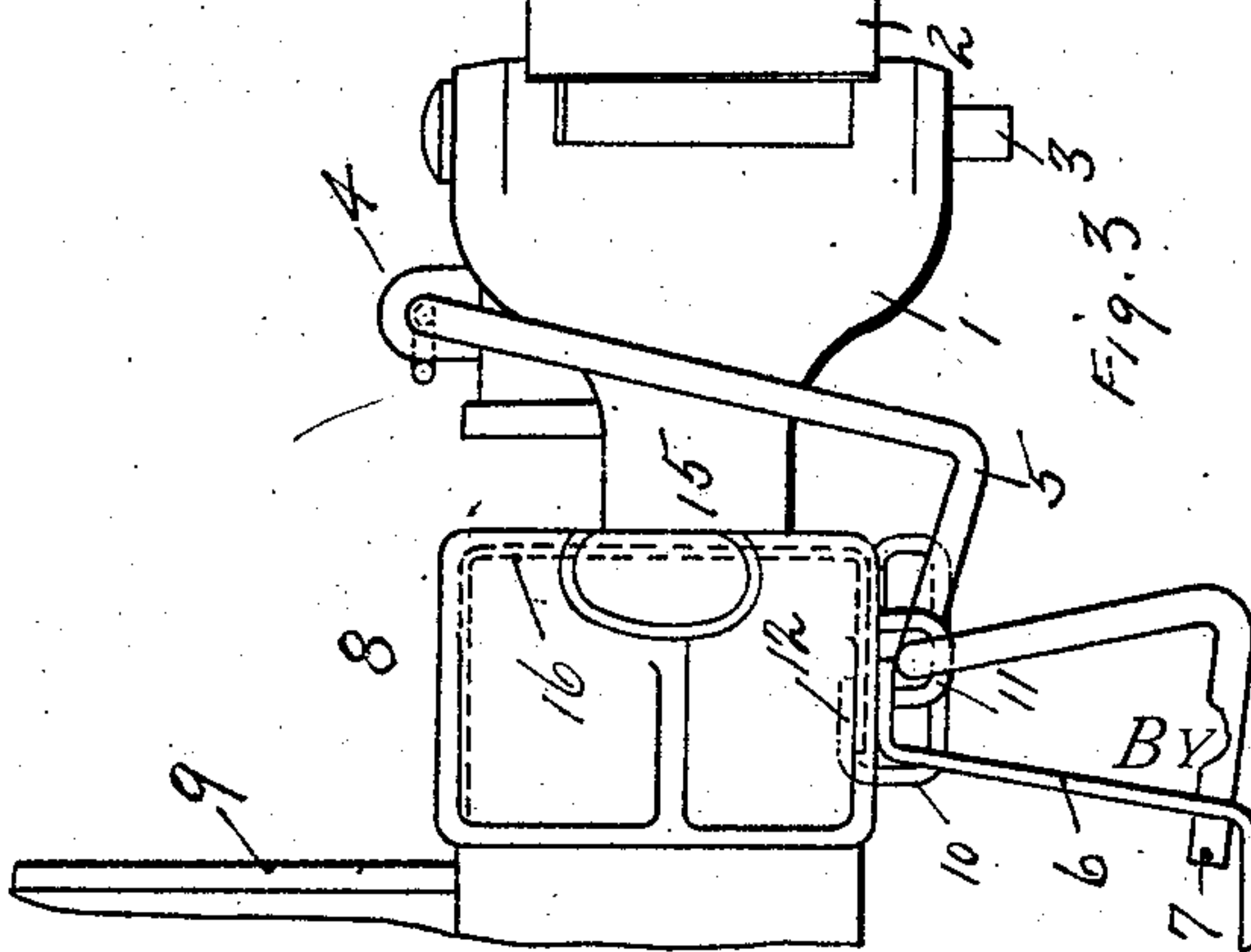
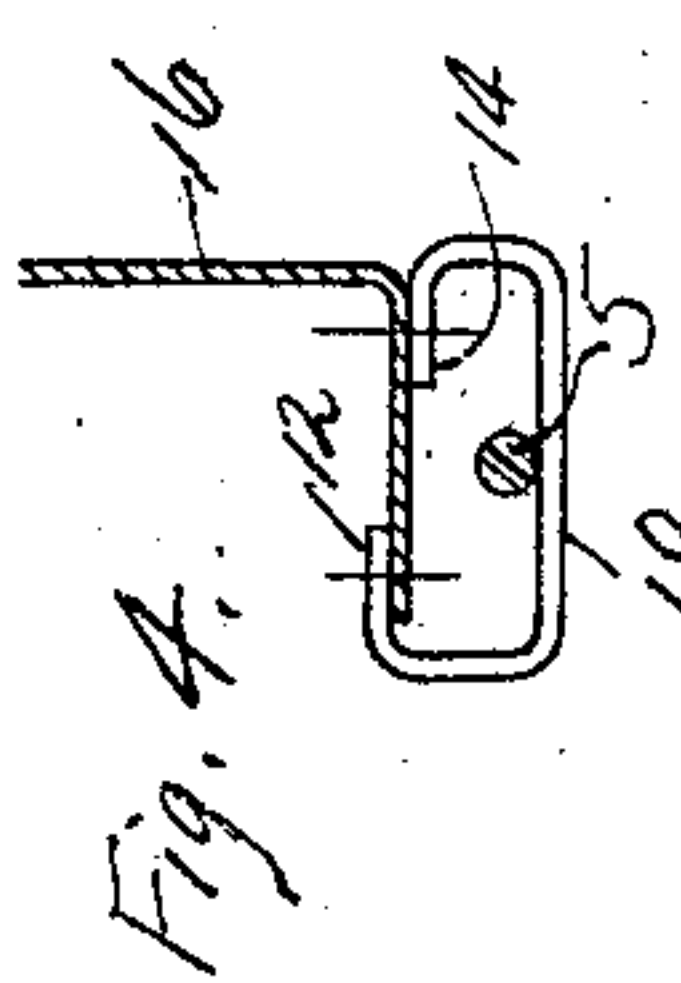
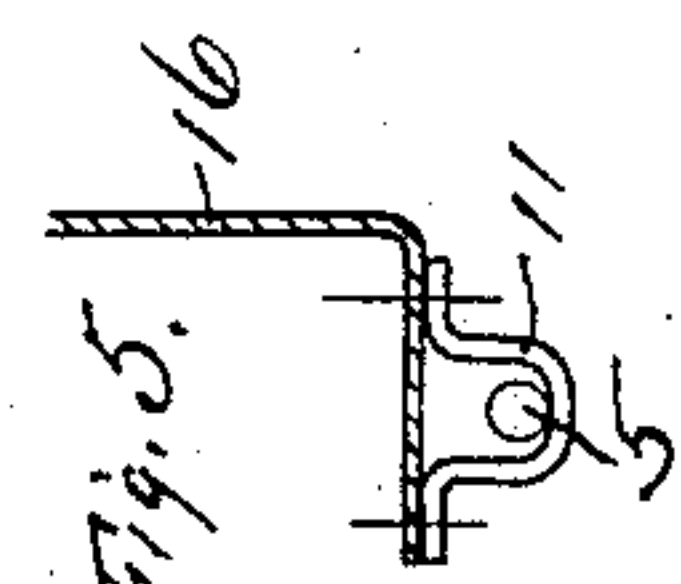
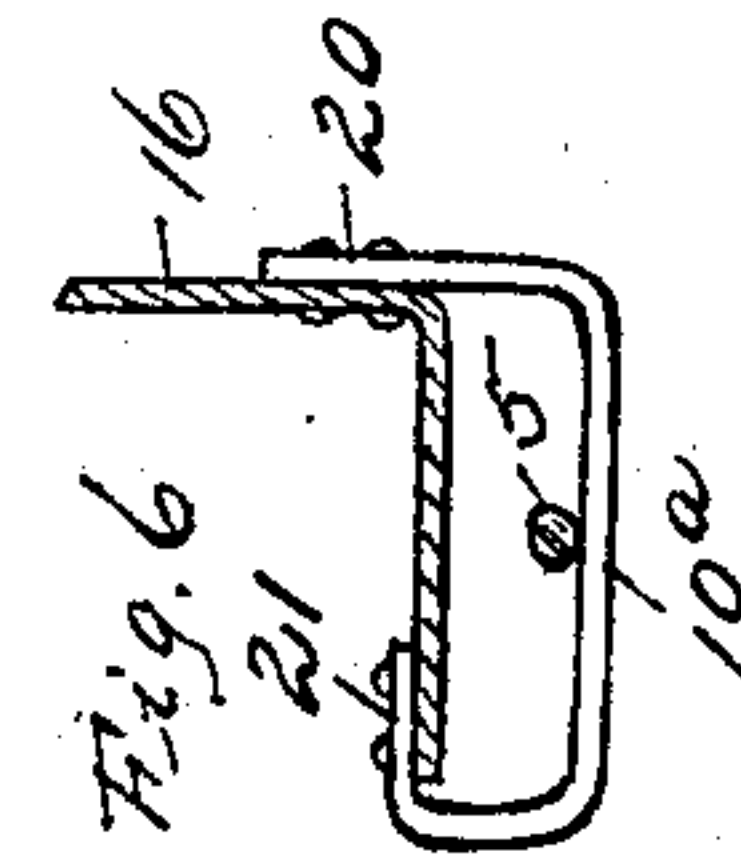
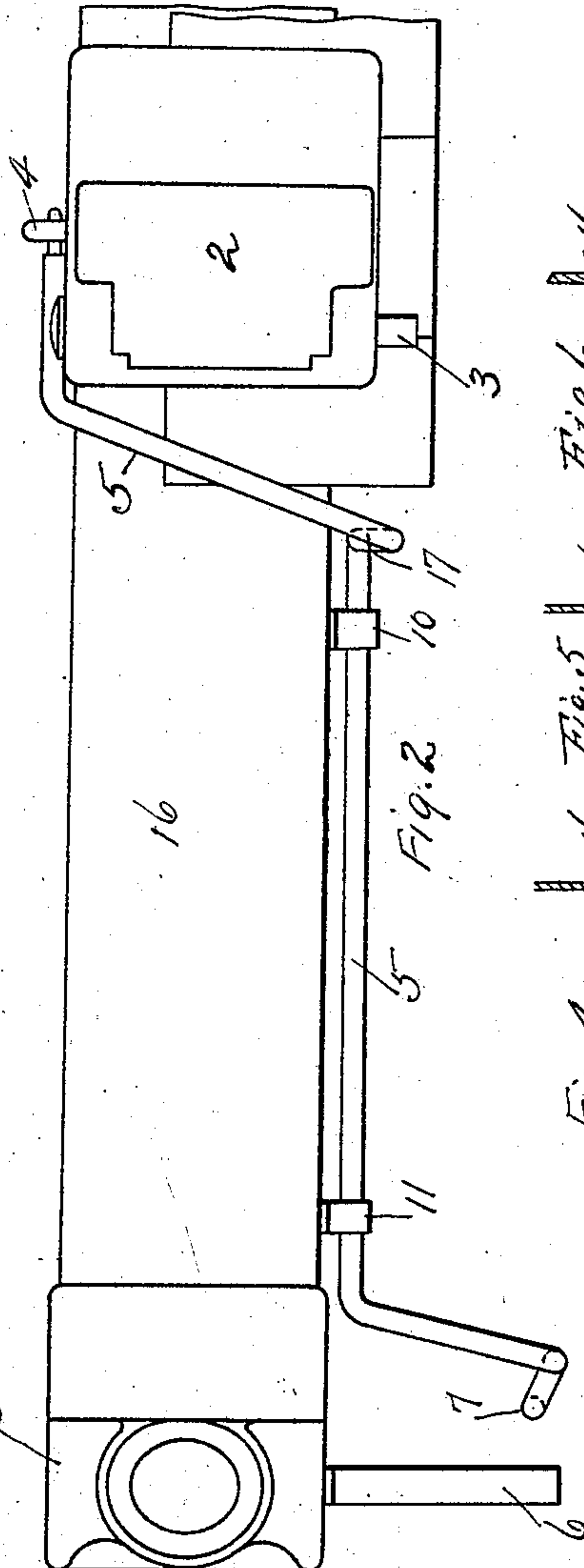
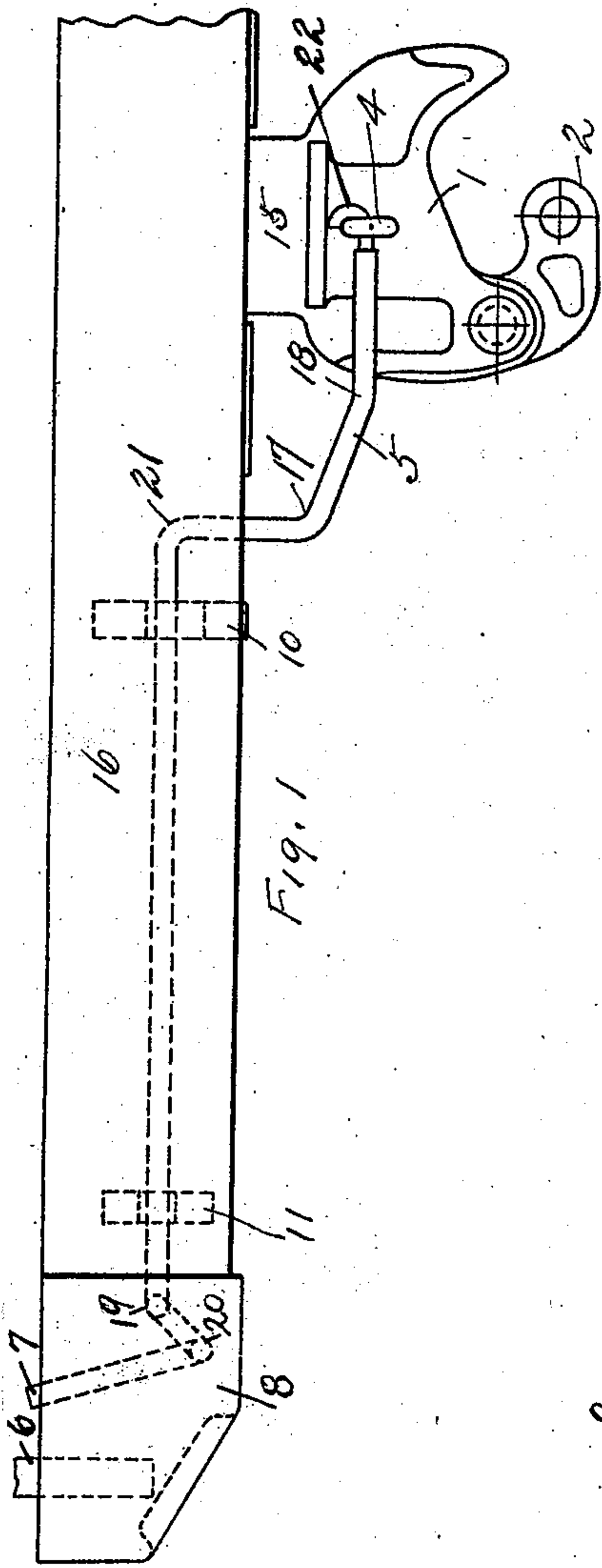


No. 827,948.

PATENTED AUG. 7, 1906.

J. E. ULSH.
RELEASE RIGGING FOR CAR COUPLINGS.
APPLICATION FILED FEB. 23, 1906.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOSEPH E. ULSH, OF ALTOONA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF
TO CAMERON JOHNSTON, OF ALTOONA, PENNSYLVANIA.

RELEASE-RIGGING FOR CAR-COUPPLINGS.

No. 827,948.

Specification of Letters Patent.

Patented Aug. 7, 1906.

Application filed February 23, 1906. Serial No. 302,464.

To all whom it may concern:

Be it known that I, JOSEPH E. ULSH, a citizen of the United States, residing at Altoona, in the county of Blair and State of Pennsylvania, have invented certain new and useful Improvements in Release-Riggings for Car-Couplers, of which the following is a specification.

The object of my invention is to provide a cheap, effective, and positive release-rigging for car-couplers that can be readily operated either by the foot or hand from a position on the ground or on the car or adjoining car.

Another object sought in this novel arrangement is to enable the trainmen to more readily cut cars away from one another, thus facilitating very greatly the despatch of heavy traffic in classification yards. This feature is specially noticeable when the shifting of cars is performed at night, the present arrangement enabling the trainmen to hold to the car with one hand, signal the engine-man, and at the same time release the locking-pin in the coupler with his foot.

Another object sought by the present invention is to provide means by which trainmen when standing upon the step of one car can readily release the coupler on the next car with the foot, while at the same time keep their position on the car that they are riding upon.

Another object is to provide means by which the release-rod is allowed to adjust itself to the various positions of the car-coupler.

With these and many other objects that will be brought out as the nature of the invention is better understood the same consists of the novel construction, combination, and arrangement of parts, as herein fully pointed out, illustrated, and claimed.

It should be remembered that this invention is susceptible to some structural modification without departing from the scope of the invention; but a preferable embodiment is shown in the accompanying drawings, in which—

Figure 1 is a plan view of a car end sill, together with the usual form of coupler, with my release mechanism shown in position. Fig. 2 is a front elevation of the parts shown in Fig. 1. Fig. 3 is an end elevation of the parts shown in Fig. 2. Figs. 4, 5, and 6 are

detail views showing the supporting-brackets for the release-rod.

Referring to the drawings, 1 represents the usual form of coupler-head, consisting of a knuckle 2, the knuckle-pin 3, the unlocking-pin 4, and the shank of the coupler 15. The release-rod 5 is preferably made in one piece, one end being attached directly to the coupler-unlocking pin, from whence it is continued toward the right side of the car in the same plane with the eye of the unlocking-pin until the outside of the coupler is reached, from whence it is made to assume positions in a plurality of planes each differing from the other in position and inclination. The supports 10 and 11 beneath the end sill are made for the special purpose of allowing for the various movements of the coupler. At the end of the end sill 16 and beneath the end-sill poling-casting the release-rod 5 assumes positions in a plurality of planes, terminating with the end 7 slightly inclined and directed outward from the car. This slight inclination of the end of the rod brings it within easy reach of the step 6, secured to the under face of the poling-casting 8. The trainmen when operating this device will stand upon the step 6, hold to the side of the car 9 with one hand, signal with the other hand, and with his foot upon the end 7 with a slight pressure will release the coupler-knuckle, allowing the cars to be separated. This combination of movements greatly facilitates the despatch of business in classification yards.

The end of the release-rod attached to the coupler-unlocking pin is preferably made with a shoulder terminating with a hook of a quarter-turn, the hook, together with the shoulder, keeping the end of the rod connected to the unlocking-pin of the coupler.

The release-rod support 10 is of a U-shaped piece, with the outer end 14 adapted to be secured to the under side of the end sill 16, while the inner end 12 is secured on the top of the inner flange of the sill, the width of the support being such as to allow free movement of the coupler. The support 11 is a U-shaped piece, preferably of wrought-iron, and secured to the under side of the end sill of the car. It will be noticed that any movement forward of the operating end 7 of the rod results in lifting the unlocking-pin 4 of the coupler. The body of the release-rod 5 being

placed beneath the end sill and the operating end of the rod beneath the push-pole casting necessarily obviates any danger of injured hands in the release of the couplers or any danger from the rod interfering with the pol-
 5 ing of cars.

A slight modification of the inner rod-support 10 is shown in Fig. 6 of the drawings and consists in forming said support of a U-
 10 shaped strip 10^a, having its outer leg 20 extending upward along and secured to the front face of the end sill 16 and provided with an inner leg or arm portion 21, turned inward toward the outer leg and adapted to
 15 rest upon and to be secured to the top face of the lower flange of the said sill 16. The distance between the rod-supporting side of the support 10^a and the lower part of the flange of the end sill is greater than the diameter of
 20 the release-rod.

I claim—

1. The combination of a locking-pin for couplers, an integral release-rod for lifting the locking-pin, supported beneath the end
 25 sill and having means to adjust itself to the various movements of the coupler.

2. In a coupler release-rigging the combination of a release-rod attached directly to the coupler-locking pin above the coupler,
 30 the body of the rod suspended beneath the end sill, the operating end of the rod adapted to be moved forward when releasing the couplers.

3. In a coupler release-rigging, an integral
 35 release-rod attached directly to the coupler-locking pin on the upper face of the coupler,

a wide U-shaped support with its ends turned inward, one end being adapted to be secured to the bottom of the sill and the other end
 40 being turned-inward on a higher plane, the difference between the planes of the two in-turned legs being the thickness of the lower flange of the sill.

4. In a coupler release-rigging, the combination of an integral release-rod, one end being attached directly to the unlocking-pin of
 45 the coupler, said release-rod extending toward the right side of the car in a plane parallel to the plane of the eye of the unlocking-pin of the coupler, until the outside face of
 50 the coupler is reached from whence the rod is made to assume positions in a plurality of different inclined planes, the latter of the inclined planes, in which a part of the rod lies,
 55 being inclined upward and the end being beneath the end sill, a horizontal body of the rod supported by a plurality of U-shaped bearings beneath the end sill, the rod after
 60 passing the outer support being inclined downward and slightly forward thence assuming a position in a plane inclined slightly upward and protruding outward, the outer
 65 end being the operating end and being beneath the push-pole casting of the car, and immediately inside the step of the car.

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

JOSEPH E. ULSH.

Witnesses:

FRED A. WHITTAKER.

NORMAN E. GEE.