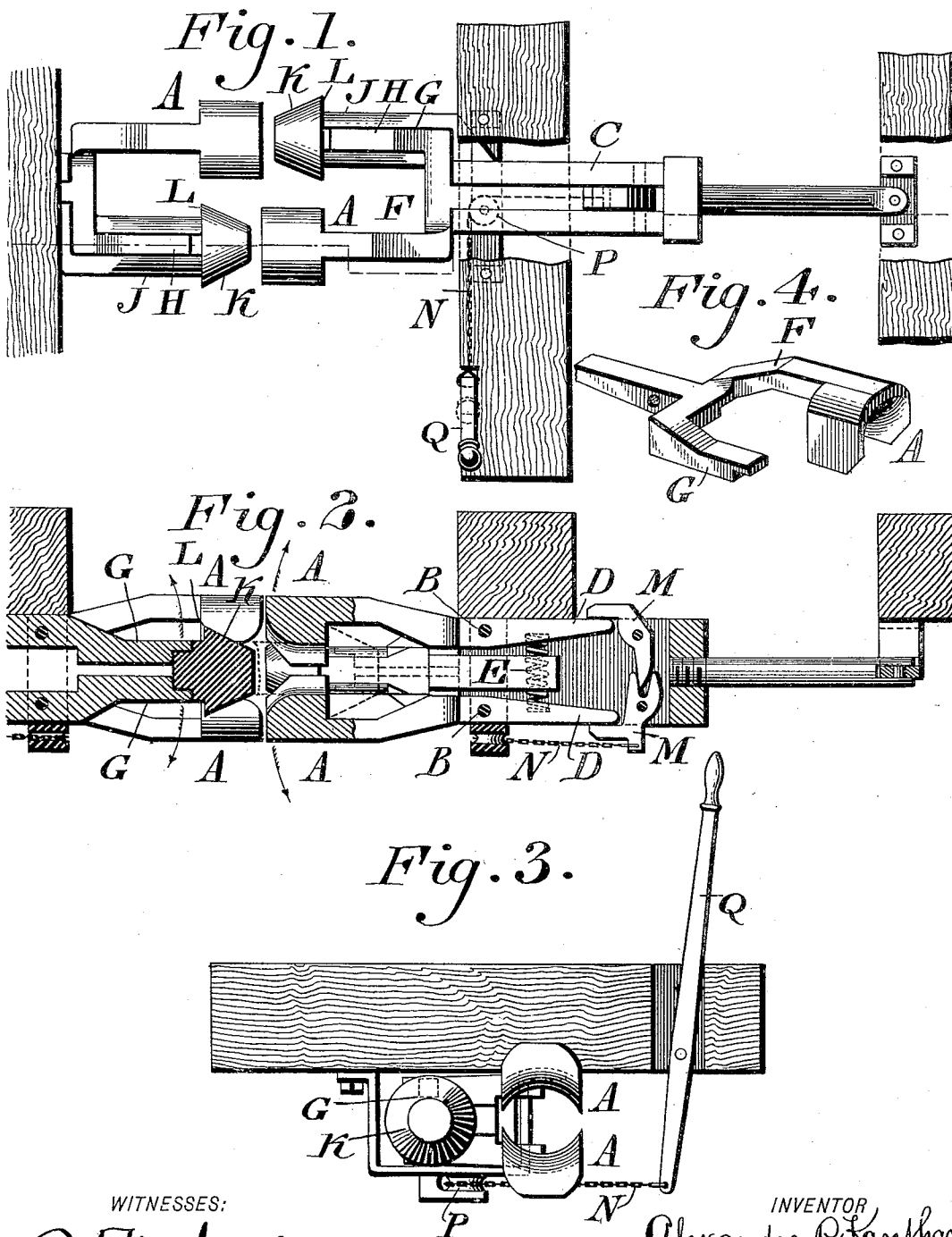


(No Model.)

A. R. KANTHACK.
CAR COUPLING.

No. 511,623.

Patented Dec. 26, 1893.



WITNESSES:

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ALEXANDER R. KANTHACK, OF PHILADELPHIA, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 511,623, dated December 26, 1893.

Application filed May 11, 1893. Serial No. 473,842. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER R. KANTHACK, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Car-Couplings, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of an automatic car coupling formed of a head and jaws with arms connected with said jaws and located on or in the shank of said head, together with means for operating said jaws and arm, whereby the jaws of the opposite cars are simultaneously cleared of the heads, and uncoupling may be effected.

Figure 1 represents a top or plan view of a car coupling embodying my invention. Fig. 2 represents a partial side elevation and partial longitudinal section thereof. Fig. 3 represents a front view thereof. Fig. 4 represents a perspective view of a detached portion.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings: A designates jaws which are pivoted by horizontal axes B to the draw-head C, said jaws being located one above the other, and having on their heels the tongues D, which are forced apart by the spring E, thus closing the jaws. Projecting from the shank F of the jaws A are arms G, which are located in recesses H in opposite place in the shanks J of the concave or tapering head K, said arms G being rearward of the shoulder L of said heads, it being seen that the opposite car is provided with similar heads and jaws, so that the head of one car may enter the jaws of the opposite car, the jaws thus embracing the opposite head. On the inner end of the draw-head are elbow-levers M which are connected as knuckles, so that one receives motion from the other. One limb of each lever engages with the adjacent tongue D, whereby said tongues may be brought together, the effect of which is to operate the jaws A and arms G.

Connected with one of the levers M is a chain or cord N which is secured to a lever Q and guided on the pulley P whereby the said lever M may be operated.

It will be seen that when the cars approach, the heads K, press against the jaws A and separate the same, after which said jaws close on the heads, and engage with the shoulders thereof, thus coupling the car.

When the lever Q is operated, the jaws are separated, thus raising them from the opposite head. The arms are also forced out from the shank of the head, whereby they press against the encircling jaws of the opposite car, thus separating said jaws. Now as the heads of the two cars are clear of the jaws thereof, the cars may be readily uncoupled, when the cars move apart. The lever Q is then let go, and the parts return to their normal position, ready for the automatic coupling of the cars when they again come together.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A jaw and a head in combination with an arm which is connected with said jaw and movable on said head, said parts being combined substantially as described.

2. A head with a recess in its shank, a separating arm movable on said shank, a jaw and means for operating the latter said arm and jaw being connected substantially as described.

3. A car coupling having pivoted jaws with tongues on their heels, a spring for closing said jaws, and knuckle levers with chain and lever for opening said jaws, said parts being combined substantially as described.

4. In a car coupling, a jaw having an arm projecting from its shank, in combination with a tapering head having a shoulder and a recess behind said shoulder, said arm being located in said recess, said parts being combined substantially as described.

5. In a car coupling, the jaws A with tongues D, in combination with the knuckle-levers M, which engage with said tongues, and means for operating said levers, substantially as described.

ALEXANDER R. KANTHACK.

Witnesses:

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