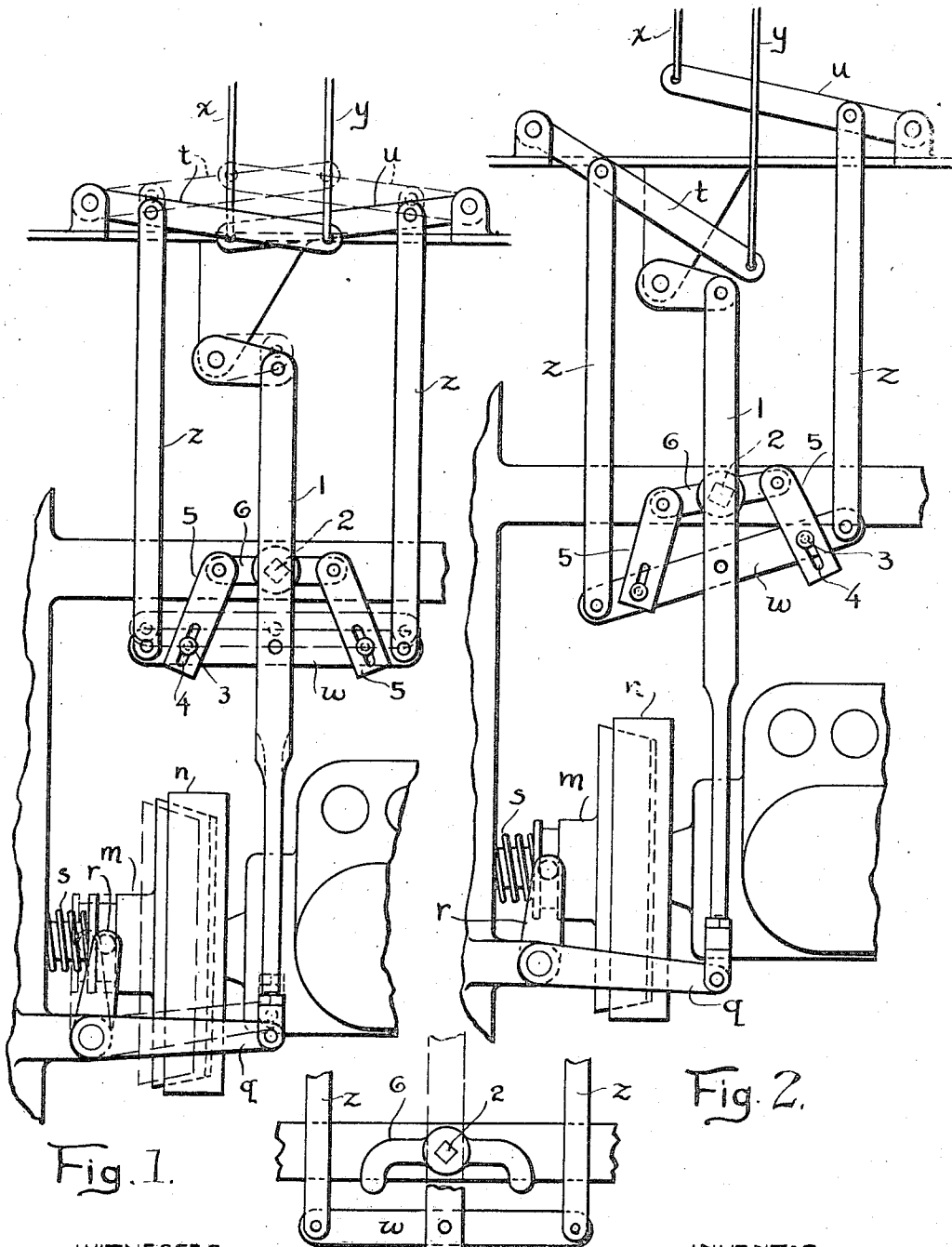


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CONTROL MECHANISM.
APPLICATION FILED OCT. 18, 1913.

1,127,160.

Patented Feb. 2, 1915.



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CONTROL MECHANISM.

1,127,160.

Specification of Letters Patent.

Patented Feb. 2, 1915.

Application filed October 18, 1913. Serial No. 795,848.

To all whom it may concern:

Be it known that I, FRANK E. BAKER, a citizen of the United States, residing at Royal Oak, county of Oakland, State of Michigan, have invented a certain new and useful Improvement in Control Mechanisms, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to control devices and has for its object a mechanism adapted to effect several different operations by ones actuating two draft devices. This will more fully appear in the following.

In the drawings: Figure 1, is a plan view of this control mechanism, the dotted lines of this figure showing the position of the parts when simultaneous pull is exerted on both the draft members to throw out the clutch. Fig. 2, is a similar view of the parts showing their position when draft is exerted on the draft member at the left of the figure. Fig. 3, is a detail showing a slight modification of the control mechanism.

This control mechanism is intended especially for use with tractors. It is intended to steer by pulling either of the two reins independently and to throw off the power or do other work by pulling them conjointly.

A conjoint pull on the reins x and y pulls the levers t , u , which are connected with a swinging cross bar w by means of the draw bars z . The swinging cross bar w is pivoted upon a connecting bar 1 which connects with the end of the bell-crank lever q which controls the clutch. It will be observed that the pivoting of the swinging bar w might be on the end of the bell-crank lever q except that, for convenience of arrangement, it is advisable to employ the connecting bar 1.

A post 2 is turned either clockwise or counter clockwise by an independent pull on either lever t or u . This pull must be great enough to allow the pin 3 to strike the bottom of the slot 4 in either of the connecting links 5 which are in the crank arm 6 of

the post 2 with the swinging bar w . This allows a certain amount of lost motion before independent pull on either rein x or y turns the post 2. This lost motion allows a short conjoint pull such as shown in dotted lines of Fig. 1 upon both reins without turning the post 2. Such a conjoint pull draws the connecting bar 1 and throws out the clutch, as shown in dotted lines of Fig. 1.

Fig. 3 shows practically the same style of control, as shown in Figs. 1 and 2, but the links 5 are done away with and the crank arm 6 is bent to take the place of the links so that the ends of the crank arm are slightly spaced from the swinging bar w when that member is in neutral position. Hence there is a certain amount of lost motion in the swinging bar w before the crank arm 6 is actuated.

What I claim is:

1. The combination of a pivoted and transversely movable bar, draft members attached to each end of the bar, a rotatable post adjacent said pivoted bar, and a crank arm extending on each side of the rotatable post and attached thereto, said crank arm having a lost motion actuating relation with the pivoted bar, substantially as described.

2. The combination of a pivoted and transversely movable bar, a rotatable post, a crank arm extending on each side of the post and fastened thereto, said crank arm being provided at each end with rigid portions that protrude toward and into proximity with respect to the pivoted bar, and a draft member connecting with each end of the pivoted bar whereby a certain amount of conjoint pull may be exercised upon the two draft members without engaging the crank, while a greater amount of independent pull on either draft member causes the bar to encounter one of the crank portions and swing the rotatable post.

3. The combination of a pivoted and transversely movable bar, a rotatable post, a crank arm extending on each side of the post and provided at each end with rigid projecting portions that project toward and into proximity with respect to the pivoted bar, two pivotally supported levers and a

draw bar connecting each lever to each end of the pivoted bar, whereby a certain amount of conjoint pull on the levers moves the pivoted bar without actuating the crank, but a greater amount of pull on either lever swings the pivoted bar and actuates the crank.

In testimony whereof, I sign this specification in the presence of two witnesses.

FRANK E. BAKER.

Witnesses:

STUART C. BARNES,
MARIETTA E. RUDD.