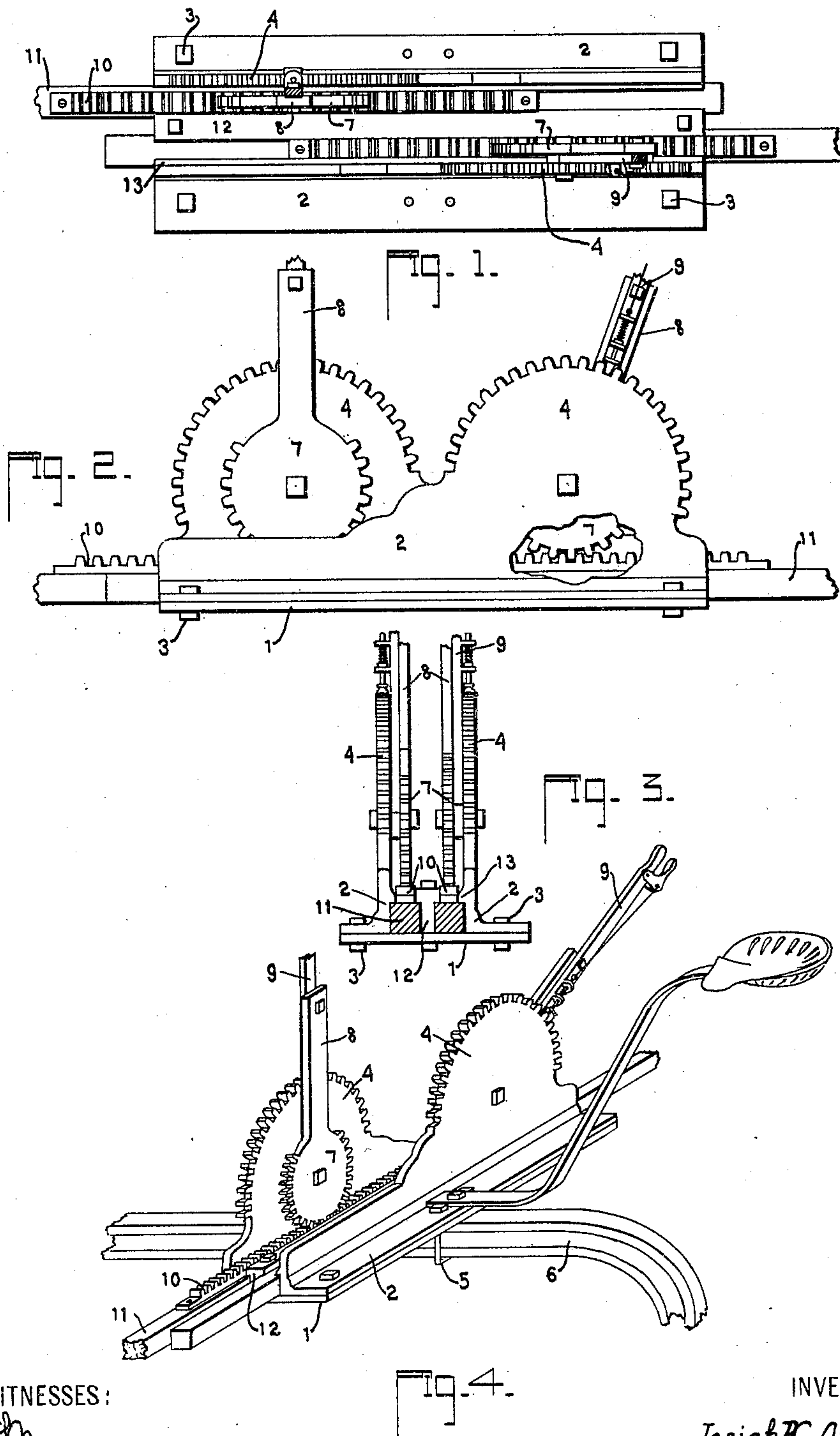


J. B. C. ARMSTRONG.
MIDDLE BREAKER AND TURNING PLOW.
APPLICATION FILED APR. 26, 1909.

945,010.

Patented Jan. 4, 1910.



WITNESSES:
J. D. Murray
Jessie Kirk

INVENTOR
Josiah B. Armstrong
BY *John M. Spelman*
ATTORNEY

UNITED STATES PATENT OFFICE.

JOSIAH B. C. ARMSTRONG, OF KAUFMAN, TEXAS.

MIDDLE-BREAKER AND TURNING-PLOW.

945,010.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed April 26, 1909. Serial No. 492,162.

To all whom it may concern:

Be it known that I, JOSIAH B. C. ARMSTRONG, a citizen of the United States, residing at Kaufman, in the county of Kaufman and State of Texas, have invented certain new and useful Improvements in Middle-Breakers and Turning-Plows, of which the following is a specification.

My invention relates to new and useful improvements in middle breakers and turning plows. Its object is to provide an attachment for a middle-breaker or turning plow, which will permit lateral adjustment of the wheel, by the use of a compound axle of adjustable length.

Another object is to provide such an attachment as will permit the distance between the furrow-wheel and the plow beam to be adjusted, thus regulating the amount of land taken by the plow.

Finally, the object of the invention is to provide a device of the character described, which will be strong, durable, simple and efficient, and comparatively easy to construct, and also one in which the various parts will not be likely to get out of working order.

With these and other objects in view, my invention has relation to certain novel features of construction and operation, an example of which is described in the following specification and illustrated in the accompanying drawing, wherein:

Figure 1 is a top view of the attachment, showing the adjustable axles in position, and other parts of the plow being omitted. Fig. 2 is a side view of the same, and Fig. 3 an end view, and Fig. 4 is a perspective view of the attachment in position upon a plow beam, the axles being broken away, and parts not essential to the invention being omitted.

Referring now more particularly to the drawings, wherein like numerals of reference designate similar parts in all the figures, the numeral 1 denotes a steel base-plate supporting the mechanism of the attachment. Castings 2 are rigidly attached to said steel plate at each of its longer sides by bolts 3. The castings 2 have vertical portions which carry toothed, circular segments 4. U-shaped bolts 5 hold the attachment rigidly to the plow-beam 6, one of such bolts

being provided at each side of said attachment. Pinions 7 are rotatably mounted at the centers of said circular segments, and are provided with arms 8, to which arms levers 9 are rigidly attached. The levers 9 are provided with the usual form of spring-actuated, toothed rod engaging said toothed, circular segments, adapting said levers to be adjusted at any desired angle. The pinions 7 engage with racks 10, mounted upon axles 11, each of which axles carries a supporting wheel, at its outer extremity. A T-shaped beam 12 is bolted to the steel plate 1, between said axles, its upper portion extending slightly over the top surfaces of said axles, holding them in position. Projections 13 upon the castings 2 overhang the axles similarly to the beam 12, preventing said axles from being displaced. It is apparent that by turning the levers 9, the racks 10 with the axles to which they are rigidly attached will be transversely displaced by the action of the pinions 7, and it will be seen that the motion of said axles is limited to a transverse direction by the beam 12 and the castings 2.

In an ordinary plow, the distance between furrow-wheel and plow-share is so fixed that if the first furrow turned diverges at any point from a straight line, the subsequent furrows will have the same divergencies. With the attachment herein described, such a divergence in the first furrow may be corrected when plowing the second furrow, by giving the plow more or less land at the point of divergence.

I am aware that changes may be made in the form and proportion of parts and details of the device herein shown and described as a preferable embodiment of my invention, without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations in said device as fairly come within the scope thereof.

What I claim, is:

In a device of the character described, the combination with the beam of a plow, of a two-part extensible axle, mounted thereupon, a guide plate attached to the plow beam, receiving the axle, a rack carried by each axle member, a circular segment at-

tached at each side of the guide plate, a lever centrally pivoted upon each circular segment, means provided to each lever to engage the circular segment adjacent thereto, and a pinion attached to the lower extremity of each lever, engaging the adjacent rack.
In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

JOSIAH B. C. ARMSTRONG.

Witnesses:

JESSIE KIRK,

JOHN S. MURRAY.