

(No Model.)

F. WENNEMEDE.  
HORSE GIN.

No. 411,946.

Patented Oct. 1, 1889.

Fig. 1

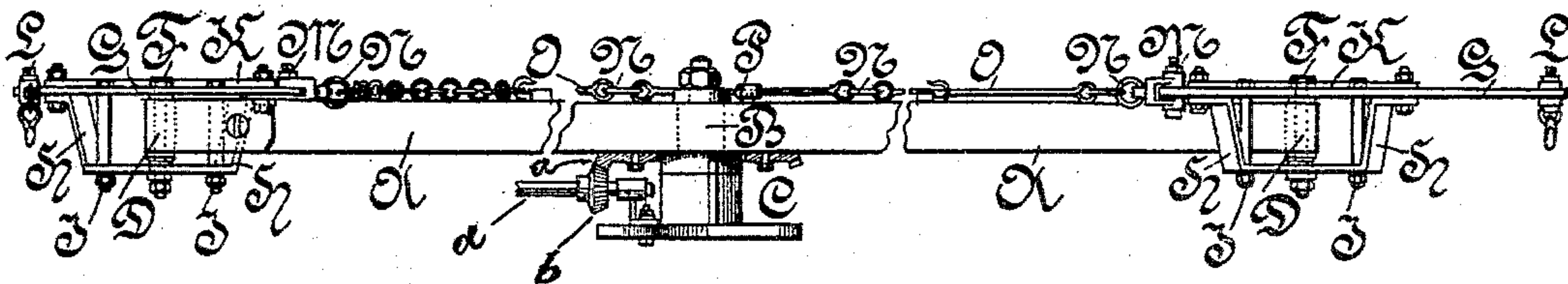


Fig. 3

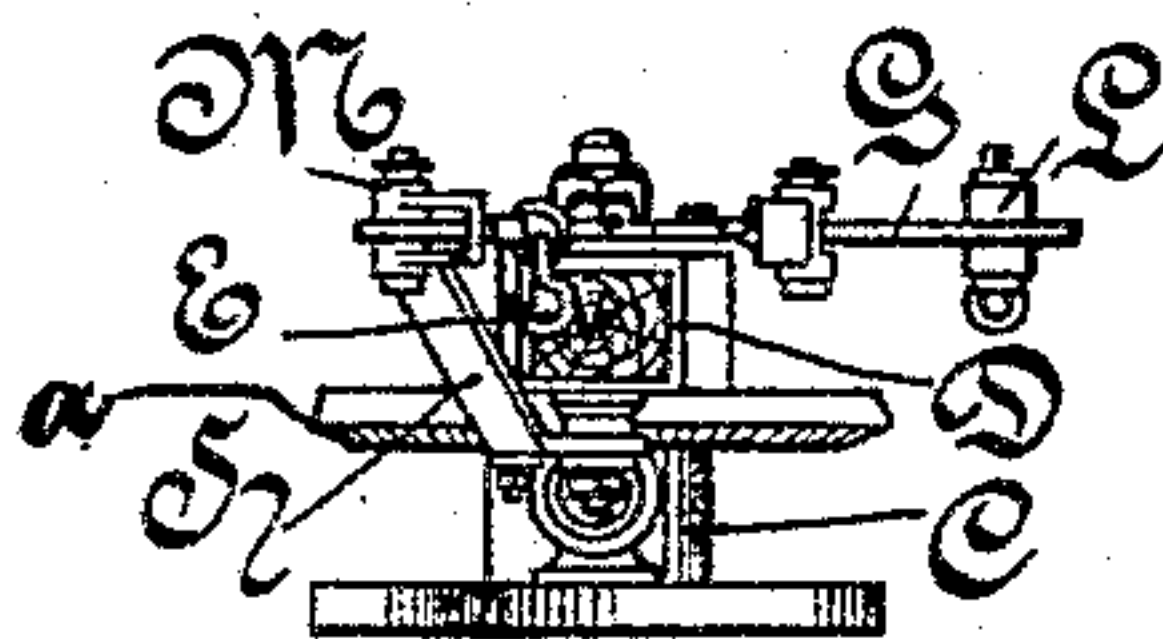
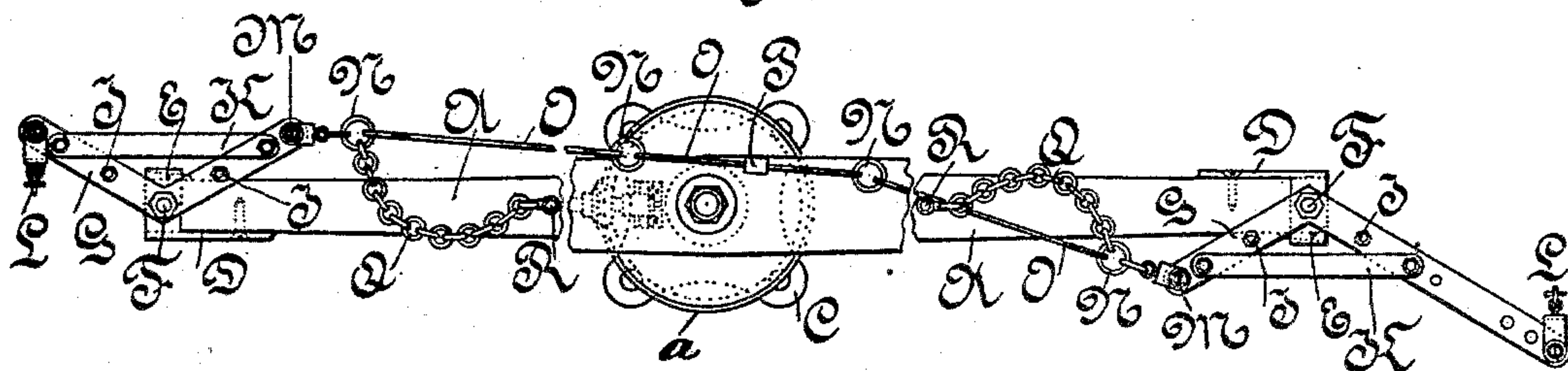


Fig. 2



Witnesses:

Wm. Wagner.  
A. Poughmans.

Inventor:

F. Wennemede  
by his attorneys  
Roeder & Briesen



# UNITED STATES PATENT OFFICE.

FRANZ WENNEMEDE, OF SAARINGEN, NEAR KLEIN-KREUTZ, PRUSSIA,  
GERMANY.

## HORSE-GIN.

SPECIFICATION forming part of Letters Patent No. 411,946, dated October 1, 1889.

Application filed June 18, 1889. Serial No. 314,748. (No model.)

*To all whom it may concern:*

Be it known that I, FRANZ WENNEMEDE, a subject of the King of Prussia, residing at Saaringen, near Klein-Kreutz, Prussia, German Empire, have invented a new and Improved Horse-Gin, of which the following is a specification.

This invention relates to an improved horse-gin, and the object of my invention is to provide means for equally distributing among a number of horses put to the gin the amount of traction applied to work the same. Thus, should one horse slacken its pace or fail to pull, the other horse or horses are not submitted to an undue momentary overstrain. Any irregularity in the working of traction is equalized by my improved gin, which thus serves to relieve the horses.

The invention consists in the various features of improvement, more fully pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of a horse-gin provided with my improvement. Fig. 2 is a plan of the same; Fig. 3, an end view thereof.

The cross-beam A of the gin turns freely on the central shaft B, secured to the supporting cast-iron block C, carried by a bed of stone or wood beams. To each end of the cross-beam A there is secured a metal edging D by screws E. Through the edging passes a strong bolt F, the projecting ends of which serve as pivots for an angle-lever G, the two arms of which may be of equal or of different length. To the angle-lever G a lower parallel frame H is bolted by its upward-inclined arms. The frame is pivoted on the same bolt F, and is secured to the lever G by studs or bolts I, thus forming a strong frame, the upper part of which may be strengthened by a cross bar or brace K. To the outer end of lever G a hook L is secured, to which the singletree may be attached. To the inner end of lever G a hub M is pivoted, said hub being connected through rings N and rods O to the corresponding hub M of the lever at the other end of the cross-beam A.

The central connecting-rod O is guided within a sleeve P to maintain its position. To the outer ring N a chain Q is attached, the other

end of which is secured to a fixed hook or loop R, projecting upward from beam A. Below the beam A a bevel-gear *a* is mounted on the common shaft B, gearing with a pinion *b* on a horizontal shaft *d*, which transmits the rotary motion obtained by the traction to other mechanism outside of the gin. By the use of crown-wheels a more advantageous transmission of motion may be obtained. If both levers G have equal arms and an equal strain is applied to them, the connecting-rods O will keep their normal position as long as the strain on one end of the beam is neither released nor increased. Should, however, the strain change at one end, the lever G will be at once drawn to that end where the strain exceeds that working at the other end, and the rods O will accordingly be shifted in the same direction. In this way neither of the two horses or sets of horses is momentarily released or suddenly overworked.

In case of putting to the two ends of the cross-beam A two horses of unequal strength, or a different number of horses, (for instance, one or two to one end and two or three to the other end,) the difference in strain is equalized by applying to one end a lever G of different length of arms, the long outside arm of said lever being provided with several holes to fit the hook L. This hook may be attached to that one of the holes that is more or less distant from the pivot F, according to the amount of difference of strain; or two hooks L for two horses may be attached to the long arm of the lever. Should the strain at one end of the beam A be totally released, the chain Q will retain the lever G sufficiently to allow the horse or set of horses at the other end to work on. If the horse or set of horses be put only to one end of cross-beam A, the ring N of hub M at the opposite end of the beam may be engaged by a corresponding hook. The driver, with some attention, will easily see from the play of the lever G and rods O which of the horses is to be driven.

The size of the horse-gin and of its constituent parts may be varied according to the requirements.

What I claim is—

1. The combination of pivoted beam A, with

connected elbow-levers G pivoted thereto, and with the frames H, secured to the elbow-levers, substantially as specified.

2. The combination, in a gin, of the following elements: pivoted beam A, elbow-levers G H, braces K, hubs M, rings N, rods O, and chains Q, substantially as specified.

In testimony whereof I hereunto sign my name, in the presence of two subscribing witnesses, this 24th day of May, 1889.

FRANZ WENNEMEDE.

Witnesses:

B. ROI,  
SALO KARMINSKI.