(No Model.)

D. HULL.

BRAKE.

No. 452,272. Patented May 12, 1891.

Fig. 1.

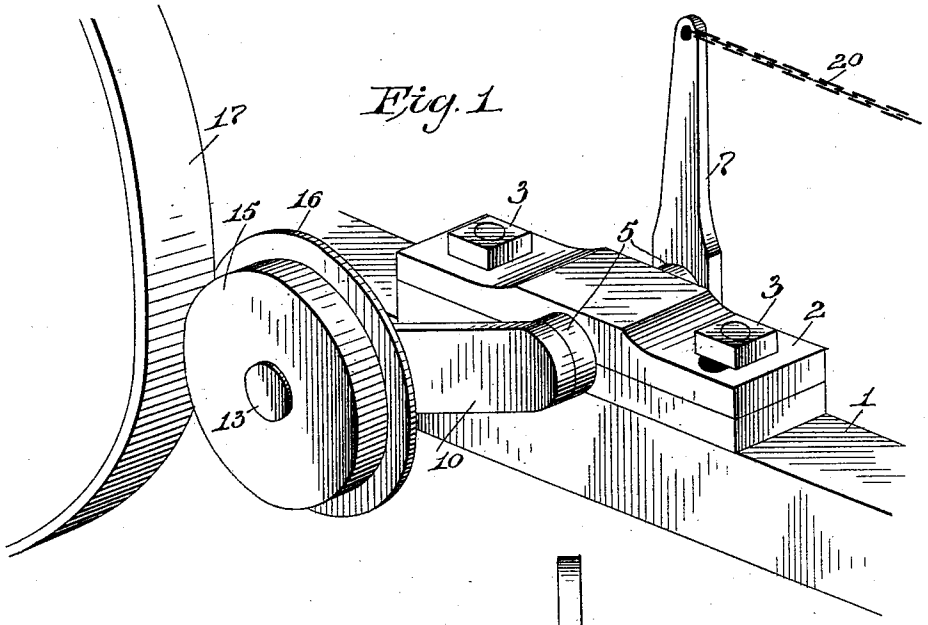
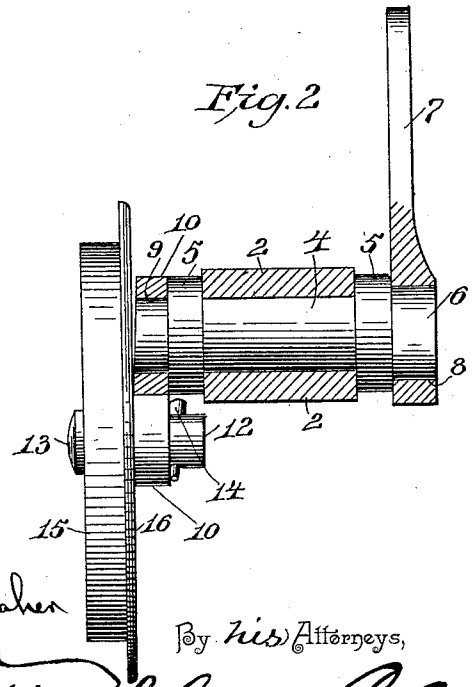


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID HULL, OF COLFAX, WASHINGTON.

BRAKE.

SPECIFICATION forming part of Letters Patent No. 452,272, dated May 12, 1891.

Application filed February 18, 1891. Serial No. 381,889. (No model.)

To all whom it may concern:

Be it known that I, DAVID HULL, a citizen of the United States, residing at Colfax, in the county of Whitman and State of Washington, have invented a new and useful Brake, of which the following is a specification.

This invention relates to improvements in brakes, and is especially intended to be applied to that class of harvesters known as "headers," and to be used in connection with the drive-wheel thereof. It will, however, be apparent that the brake is also applicable to wheels of wagons and other types of machines.

The objects of the invention are to provide a brake of cheap and simple construction, easy of manipulation, and which, while not preventing the rotation of the wheel, and consequently the stoppage of the machinery, will tend to decrease the speed of rotation.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of a brake constructed in accordance with my invention. Fig. 2 is a transverse section.

Like numerals of reference indicate like parts in both the figures of the drawings.

1 designates the sill or other portion of, in this instance, a header, upon which is mounted the divided bearing-box 2, securely bolted to the sill by means of bolts 3. The longitudinal halves of the box are provided with half-bearings 3, in which is mounted a short transverse shaft 4. At each side of the bearing-box the shaft 4 is provided with an annular shoulder 5, and beyond said shoulders are reduced to form elliptical tenons 6. To the inner tenon 6 is secured a brake-lever 7, having an elliptical opening 8 for the reception of said tenon. The opposite or outer tenon 6 fits within a corresponding opening 9, formed in the inner end of a brake-arm 10. The free end of the arm 10 is provided with an opening 11, through which is passed a pin 12, terminating at its outer end in a head 13, and having a linchpin 14 passed through the pin at the inner side of the brake-arm. Upon this pin 12 may be mounted a shoe or other brake device; but I prefer the one herein described. This device consists of an annular disk or wheel 15, the periphery of which is provided with a flange 16, located at the inner side of the wheel. The disk is thus made L-shaped at its periphery and embraces the drive-wheel 17 of the machine. The brake-lever 7 may be grasped by the hand of the operator, or a chain 20 (shown by dotted lines) may lead to a conveniently-located brake-lever at some other part of the machine. The front opening of the bearing-box through which the securing-bolts are passed is preferably elongated, so that said box may be adjusted laterally, and thus maintain the brake-disk in position upon the tire of the wheel, even should the latter get out of truism.

From the above description it will be apparent that I have succeeded in providing a brake adapted to many kinds of machines the mechanisms of which are operated by drive-wheels, in which it is desirable to slow the machine without actually effecting a complete stoppage of the operation. It will be seen that the crank-arm 10, on which the brake-wheel is mounted, stands at a quarter-circle distant from the axis of motion of the arm 7, and this construction furnishes great power and effectually stops the wheel of the machine.

Having described my invention, what I claim is—

1. The combination, with the bearing-box and the transverse shaft rotatably mounted therein and terminating at its opposite ends in tenons, of a brake-lever perforated to receive one tenon, a brake-arm perforated to receive the other tenon, a transverse bearing-pin mounted in the free end of the brake-arm, and a brake-disk mounted on the arm and having an L-shaped periphery, substantially as specified.

2. The combination, with the box the ends of which are provided with bolt-openings, one of which is elongated and transversely disposed, the sill, the bolts passed through the openings into the sill, the rotatable shaft provided at opposite sides of the blocks with shoulders and beyond the same terminating in reduced tenons, of a brake-lever mounted on one tenon, a brake-arm on the opposite tenon, a bearing-pin mounted in the outer end of the arm and terminating at one end in a head,

a linchpin passed through the other end, and a brake-disk having an L-shaped periphery mounted on the bearing-pin between its head and arm, substantially as specified.

3. In a brake, the shaft 4, provided at one end with crank-arm 10, the brake-wheel 15, mounted thereon and having a flanged periphery, and the brake-lever arm 7, also mounted on the shaft 4, but at a point one-quarter circle distant therefrom, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DAVID HULL.

Witnesses:
IRA WALDRON,
R. F. BANKER.