T. M. BROWN & J. R. KENDRICK.

HORSE-POWER.

No. 182,409. Patented Sept. 19, 1876.

Fig. 1.

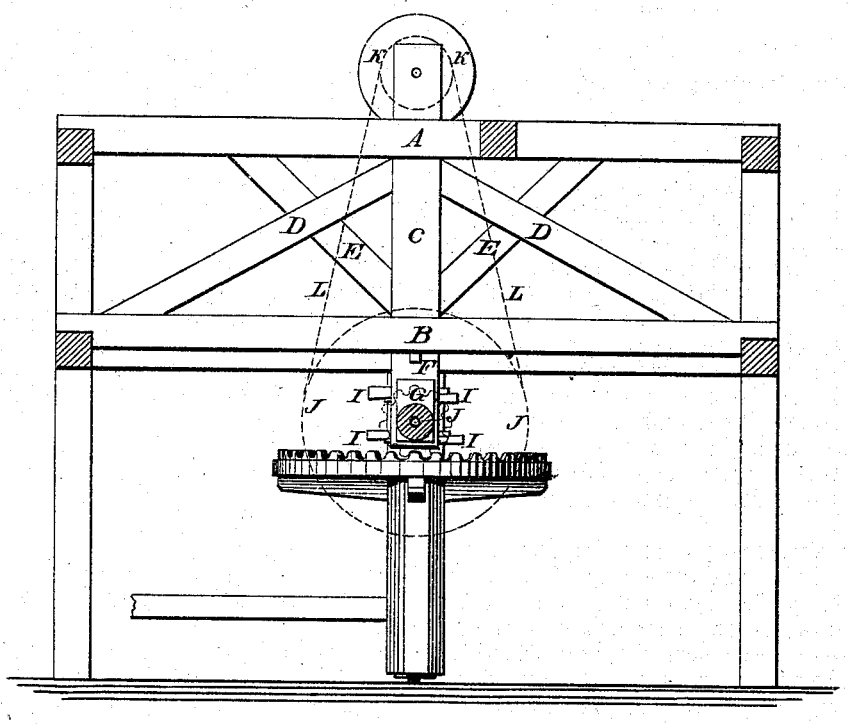


Fig. 2.

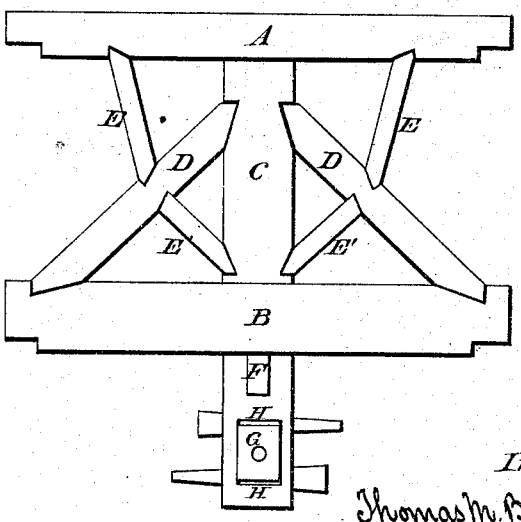


Fig. 3.

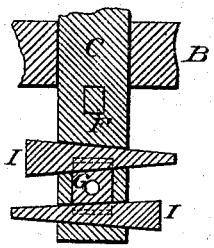
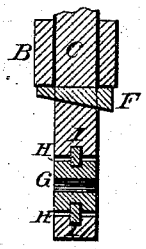


Fig. 4.



Attest:

W. B. Acker.

J. M. McNeill

Inventor:

Thomas M. Brown and John R. Kendrick

Per Parker W. Sweet Jr. & Co.

Attys.

UNITED STATES PATENT OFFICE.

THOMAS M. BROWN AND JOHN R. KENDRICK, OF SHARON, GEORGIA.

IMPROVEMENT IN HORSE-POWERS.

Specification forming part of Letters Patent No. **182,409**, dated September 19, 1876; application filed April 13, 1876.

To all whom it may concern:

Be it known that we, THOMAS M. BROWN and JOHN R. KENDRICK, both of Sharon, in the county of Taliaferro and State of Georgia, have invented certain new and useful Improvements in Attachments for Cotton-Gins; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to an improved means for constructing and attaching gin-gear; and it consists in the combination and arrangement of the braces, beams, and girders, as will be hereinafter more fully described, and in the employment of which the great strain brought to bear upon the gear by the usual power employed for such purpose is equally distributed over the several parts, the friction greatly lessened, and a lighter draft secured.

Refering to the drawings, Figure 1 is a front elevation of our improved invention. Fig. 2 is a modification of the same. Figs. 3 and 4 are detail views.

Similar letters of reference occurring on the several figures indicate like parts.

A represents the upper, and B the lower, beam, which forms the floor of the gin-room. C represents the connecting upright or king post, the upper end of which is securely fastened and mortised in the upper beam A, while the lower part passes through an opening in the beam B, and projects down a suitable distance beneath the same. D and E represent braces disposed as shown in the drawings, to lend an additional brace or support to the floor A proper of the gin-room. Directly below the beam B the upright post C is provided with a mortised opening adapted to receive a wedge-shaped block, F.

It is well known that the speed at which gins are operated is very high, causing vibration and gradual displacement of the several parts which support the same. This disadvantage is obviated by the employment of our improved construction, for by driving in the wedge-shaped block F, near the base of the upright C, the several parts are compacted or drawn more closely together by the operation, thus presenting a firm foundation or support for the proper working of the gin.

At the lower end of the upright C is arranged an adjustable bearing-block, G, which is adapted to move easily up or down in a correspondingly-shaped recess, H, and held in any required position through the medium of wedge-shaped keys I, which enter above and below said bearing, as fully illustrated in the drawings.

The band-wheel J has its bearings in the center of this adjustable block G, and is connected to the pulley K of the gin by means of the belt L, which, it will be readily observed, can be loosened or tightened on the pulleys J K by partially withdrawing or driving in the keys I, as the nature of the occasion may seem to require.

A modified form of our invention is illustrated in Fig. 2 of the drawings, where the braces D are let into recesses in the upright post C, and in the lower beam B, while the braces E E′ are let into similar recesses in the upright C, braces D, and upper beam A.

By this construction the use of ordinary fastenings is done away with, and as the parts become loose or slightly displaced by the working of the gin the key F can be driven in, thus bringing the displaced parts tightly together.

We do not limit ourselves to the key F however, as it is evident that other well-known means or equivalents can be employed for the same purpose.

The advantages of our invention will be readily seen, inasmuch as in its employment in cotton-gins the gear is held stationary and immovable, thereby lessening the friction of the working parts, and securing at the same time a lighter draft with but little wear of the gear.

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

1. The hereinbefore-described attachment for cotton-gins, consisting of the beams A and B, upright C, provided with the key F, and adjustable bearings G, and braces D and E, the several parts being constructed, arranged,

and combined to operate substantially as and for the purpose described.

2. The adjustable bearing G, provided with the keys I, in combination with the upright C, and pulleys J K, and belt L, substantially as and for the purpose described.

In testimony that we claim the foregoing as our own invention we affix our signatures in presence of two witnesses.

THOMAS M. BROWN.
JOHN R. KENDRICK.

Witnesses:
J. R. BEAZLEY,
J. O. STEWART.