J. E. MULDROWE.
HORSE-POWER.

No. 186,152. Patentd Jan. 9, 1877.

Fig. 1.

Fig. 2.

Witnesses

Inventor

Attorneys.
To all whom it may concern:

Be it known that I, JOHN E. MULDROW, of Lynchburg, in the county of Sumter and State of South Carolina, have invented certain new and useful Improvements in Horse-Power; and I 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.

The nature of my invention consists in the construction and arrangement of a horse-power for cotton-gins, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a plan view of my horse-power. Fig. 2 is a vertical section of the same through the line \( x \). of Fig. 1.

A represents a suitable frame-work, in which is a vertical shaft or roller, B, turning upon pivots, and provided with a sweep, C, for the attachment of the team. On the shaft or roller B is a horizontal wheel or drum, D, on the top of which is fastened an annular band, E, of india-rubber, canvas, or other suitable material. F represents a horizontal shaft, also turning upon pivots, on which is secured a fly-wheel, G, and also a band-wheel, H. There is further secured upon this shaft an india-rubber drum, I, or a wooden drum covered with india-rubber, which presses on the rubber band E of the large wheel D. At the end of the drum I is a circumferential flange or head, J, the side of which extends over and presses against the edge or rim of the wheel D.

The shaft F has its pivot bearings in hangers V V, which are made adjustable, so that the shaft can be raised or lowered to bring the drum I and wheel D in proper contact with each other.

K represents another horizontal shaft, which also turns on pivots arranged in fixed hangers. On this shaft is a fly-wheel, L, and also a band-wheel, M, for a band to pass around and connect with the cotton-gin or other machinery. There is also on this shaft a drum, N, which connects and is turned by the band O passing around the band-wheel H.

When the horse pulls the sweep C the whole power is put in motion. This power may be run also with a horizontal band-wheel. To this end I provide a vertical shaft, P, which turns on pivots, and is arranged in a suitable frame-work attached to the main frame A. On this shaft is an india-rubber drum, R, which presses against the rim of the large wheel D. On the shaft P, up in the gin-house, is a horizontal band-wheel, S, with a band passing around it, and connecting with the cotton-gin or other machinery.

Between the band-wheel S and the cotton-gin are two rollers, T and U, fixed and set in proper frames. The roller T is set at an angle, but the roller U is perpendicular, and they are both intended for tightening the band, giving it the proper twist, and holding it to its place on the gin-hub, and also on the band-wheel.

By my invention I can run two gins at the same time by using both wheels, or I can use either and run one gin only.

This power is simple in construction, cheap, and durable, and takes considerably less horse-power than those now in use.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a horse-power, the combination of the vertical shaft or roller B, with horizontal wheel D, having rubber band E, the shaft F, hung in adjustable hangers V V, drum I, circumferential flange J, shaft K, pulleys H M N, and fly-wheels G L, all arranged substantially as and for the purposes herein set forth.

2. In a horse-power, the horizontal wheel D E, horizontal shaft F, drum I, vertical shaft P, and drum R, all constructed and arranged substantially as and for the purpose specified.

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

JOHN E. MULDROW.

Witnesses:

W. B. CARNES,
J. N. CARNES.