COTTON-STALK CRUSHER.

SPECIFICATION forming part of Letters Patent No. 465,139, dated December 15, 1891.

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To all whom it may concern:

Be it known that I, JAMES LESTER, a citizen of the United States, residing at Prosperity, in the county of Newberry and State of South Carolina, have invented certain new and useful Improvements in Cotton-Stalk Crushers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in cotton-stalk crushers of that class embodying crushing-wheels provided with knives or blades adapted to revolve upon the ground.

The object of the invention is to provide a machine of this character of simple and improved construction and arrangement and possessing advantages in points of inexpensiveness and general efficiency.

A further object of the invention is to provide simple and efficient means for adjusting the crushing-wheels nearer to or farther from each other, whereby the wheels may be regulated to coincide with any-width row of stalks.

In the drawings, in which like letters of reference indicate corresponding parts, Figure 1 is a perspective view of a cotton-stalk crusher embodying my invention. Figure 2 is a top or plan view thereof. Figure 3 is a transverse vertical sectional view taken centrally through the axle. Figure 4 is a detail perspective view of one of the wheels. Figure 5 is a similar view of one of the adjustable bearings.

Referring to the drawings, A designates the tongue of the machine, to the sides of which, some distance from its rear end, are secured the forward ends of two flat metallic bars a, the latter, in connection with the rear portion of the tongue, forming the front of the device. The bars a from their secured front ends diverge rearwardly, and at the point s are bent inwardly until the rear portions a' a' of said bars are parallel with the tongue. The extreme front ends of the bars are bent to form eyes a" a" and securing-danges a" a", the latter being adapted to be secured to the bars by bolts a" a". By this construction it will be obvious that a light and durable frame is formed for the machine and all unnecessary material and consequent additional weight thus dispensed with. Within the eyes a" are secured the ends of an axle B, the latter being disposed transversely with relation to the machine. The axle B is cylindrical throughout its length, preferably formed of a metallic pipe, and is secured to the tongue at the point of intersection therewith by a clip b.

C C designate the wheels or crushers, disposed between the rear portion a' of the bars 60 a and the tongue, one at each side the frame. These wheels each comprise two disks D D, preferably cast of metal, and which consist of a circular rim d d, a hub d', and connecting-spokes e, all of said parts being integral. Connecting said disks is a series of radially-disposed removable knives or blades E. The ends of each of the latter are bent at right angles thereto and preferably in opposite directions to form securing-lugs e. The lugs e 70 are each provided with an eye e', through which and coincident eyes e" in the rims d are passed securing-bolts e". By this construction any of the knives or blades may be independently removed for purpose of repair 75 without interfering with the remaining knives. The outer or cutting edge of each knife or blade is preferably located at a plane with the periphery of the rims d.

The wheels are adapted to be adjusted laterally upon the axle to coincide with the width of the rows of stalks, and to effect this end I provide means which I will now proceed to describe. F designates metallic sleeves (two to each wheel) which are adjustably mounted upon the axle and fit closely thereon, said sleeves being received by the bore of the respective hub d' of the wheels. At the outer end of each sleeve is formed an integral collar F, of greater diameter than the sleeve, and is adapted to bear against the adjacent hub. A set-screw f is passed through each collar at one side, which is adapted to bind the sleeves in adjusted position. Thus in practice to adjust the wheels the set-screws f are loosened from the axe and the sleeves F thrown in the desired direction. After adjustment the set-screws are again tightened, the wheels revolving upon the sleeves and held against independent lateral play by the collars F.
From the tongue projects upwardly and rearwardly a standard \( g \), upon the upper end of which is carried an operator's seat \( G \).

I claim as my invention—

5 In a cotton-stalk crusher, the combination, with the frame and an axle rigidly secured thereto, of adjustable sleeves disposed in pairs upon the axle and provided at their distal ends with enlarged collars, crusher-wheels comprising end disks mounted and rotating upon said sleeves, and set-screws for binding the latter in adjusted position and against rotation, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES LESTER.

Witnesses:

C. T. WYCLER,
C. J. HUNTER.