

F. J. BULLOCK.
FAN WHEEL.
APPLICATION FILED MAY 2, 1916.

1,286,526.

Patented Dec. 3, 1918.

Fig. 1.

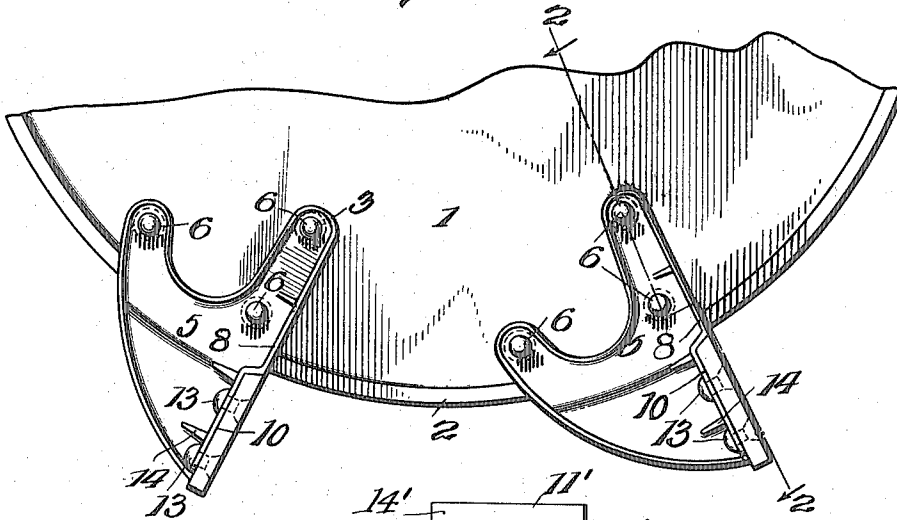
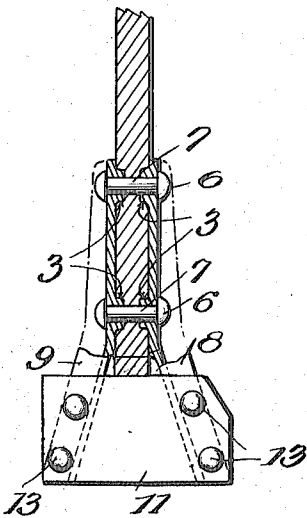
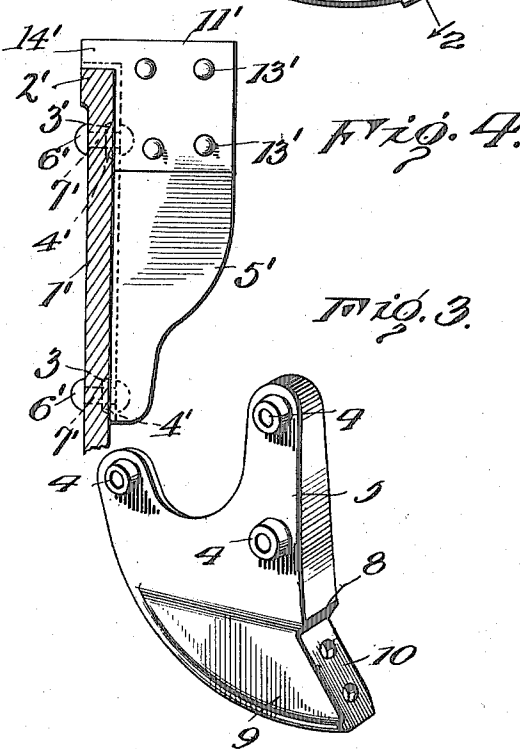


Fig. 2.



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UNITED STATES PATENT OFFICE.

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FAN-WHEEL.

1,286,526.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRED J. BULLOCK, a citizen of the United States, residing at Shortsville, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Fan-Wheels, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to certain new and useful improvements in ensilage cutting wheel construction and more particularly to a fan construction; the object being to provide a cutting wheel with a fan having a detachable blade carried by supports in such a manner that a rigid connection is formed in order to prevent the fan from accidentally working loose when the cutter wheel is in operation.

Another object of my invention is to provide a cutting wheel in which the fan construction thereof is provided with a detachable blade extending out beyond the supports so that when the blade wears, it can be readily removed and another blade attached.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing—

Figure 1, is a plan view of a portion of a cutting wheel showing the application of my improved construction of fan thereto;

Fig. 2, is a section taken on the line 2—2 of Fig. 1; and

Fig. 3, is a detail perspective of one of the blade supports;

Fig. 4, is a detail section through the cutting wheel showing a slightly modified form of fan construction.

Like numerals of reference refer to like parts in the several figures of the drawings.

In the drawing, 1 indicates a cutting wheel formed of a solid body having a tire 2 of steel shrunk around the periphery thereof.

The opposite faces of the body of the cutting wheel 1 are provided with recesses 3 into which are adapted to extend the apertured bosses 4 of a fan support 5, one of these supports being arranged on each side of the cutting wheel and through which, rivets 6 are adapted to pass, the recesses 3 communicating with one another by bores 7, as shown in Fig. 2, so as to allow the rivets

to pass through the apertured bosses and cutting wheel in order to hold the supports 5 in position upon the opposite faces thereof.

Supports 5 are arranged on the sides of the cutting wheel and terminate in diverging portions 9 provided with seats 10 formed by flange portions 8 in which are adapted to be arranged fan blades 11 which are secured in position by rivets 13 passing through the blades 11 and flanges forming the seat 10, said flanges being supported by integral bracket portions 14.

In this construction of ensilage cutting wheel, it will be seen that the fans forming the lower part of the cutting wheel are mounted upon supports secured to opposite faces of the cutting wheel in such a manner that the blades 11 are mounted within seats so as to place the face of the blades flush with the edges of the supports, these blades being capable of being removed so that when the outer edges, which are subjected to the greatest amount of wear are brought flush with the edges of the supports, they can be removed and new blades inserted.

In the modification shown in Fig. 4, 1' indicates the cutting wheel which is provided with recesses 3' into which are adapted to extend the apertured bosses 4' of a fan support 5' arranged on one side of the cutting wheel as clearly shown in Fig. 4. The fan support 5' is provided with a reduced portion forming a seat (not shown) in which is adapted to be arranged a fan blade 11' which is secured in position by rivets 13' extending through the flanges thereof, said blade having a portion 14' extending over the tire 2' of the cutting wheel. In this construction it will be seen that I have provided a fan construction for cutting wheels in which the fan support is secured to one side of the cutting wheel only. The bottom of the recesses 3' are provided with bores 7' extending through the body of the wheel 1' and the apertured bosses 4' of the fan support 5 in which are arranged rivets 6', the ends of which are headed as clearly shown, for securing the fan support to the side of the cutting wheel.

I claim:

1. A fan wheel provided with spaced supports secured thereto on opposite sides thereof, having inset seats, of a fan blade mounted in the seats of said supports having their faces flush with the edges of said supports,

and means for securing said blade within the seats of said supports.

2. A wheel having recesses formed in the opposite faces thereof, supports provided with bosses mounted in said recesses, rivets passing through said supports and cutting wheel, said supports being provided with seats, and a blade mounted in said seats.

3. A wheel having a solid body provided with a tire, the side faces of said wheel being provided with apertured recesses, supports provided with apertured bosses mounted within said recesses, securing members passing through said bosses, said supports being provided with seats, and fan blades arranged within said seats.

4. A wheel, comprising a body portion and a tire portion, said body portion having apertured recesses, supports provided with apertured bosses mounted in said recesses, rivets passing through said apertured bosses for securing said supports upon the opposite faces of said wheel, said supports having flanged edges provided with seats, blades mounted within the seats of said supports, rivets passing through said blades and flanges, for securing said blades on said supports.

5. A wheel having a solid body and a tire, supports mounted upon the opposite faces

of said wheel having diverging portions extending outwardly beyond the tire thereof, said diverging portions being provided with seats, and a fan blade secured within said seats.

6. A wheel having recesses formed in the face thereof, a support secured thereto provided with bosses extending into said recesses, said support being provided with a seat at its outer end, the blade arranged in the seat of said support extending over the periphery of said cutting wheel, the face of said blade being flush with the edge of said support, and means for securing said blade in a seat of said support.

7. A device of the kind described, comprising a wheel having supports extending outwardly beyond the periphery of said wheel, bolts extending through said supports and wheel for securing said supports on the opposite faces thereof, said supports provided with seats and blades arranged within said seats having their faces flush with the edges of said supports.

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

FRED J. BULLOCK.

Witnesses:

B. BENNETT BROWN,
WILLIS C. ELLIS.