No. 711,116. Patented Oct. 14, 1902.

G. M. MITCHELL.

HOOD FOR PNEUMATIC STRAW STACKERS.

(Application filed Mar. 28, 1902.)

(No Model.)

Fig. 1

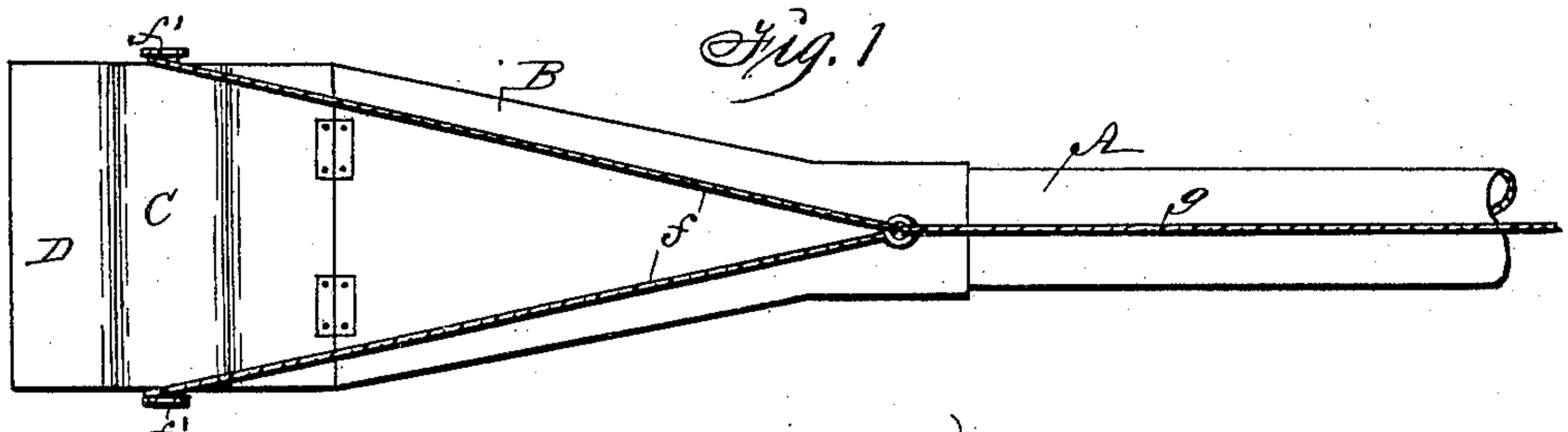


Fig. 2

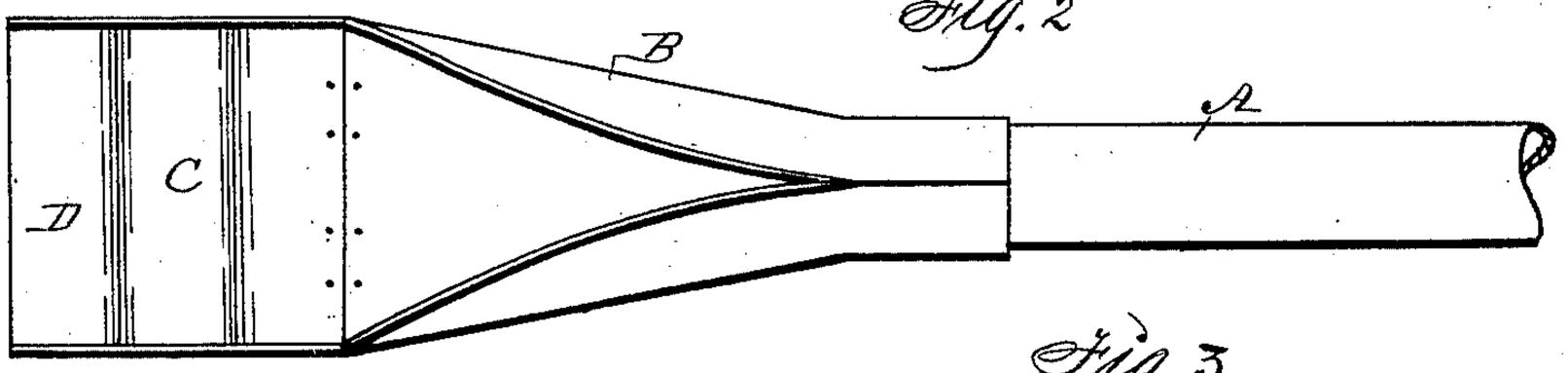


Fig. 3

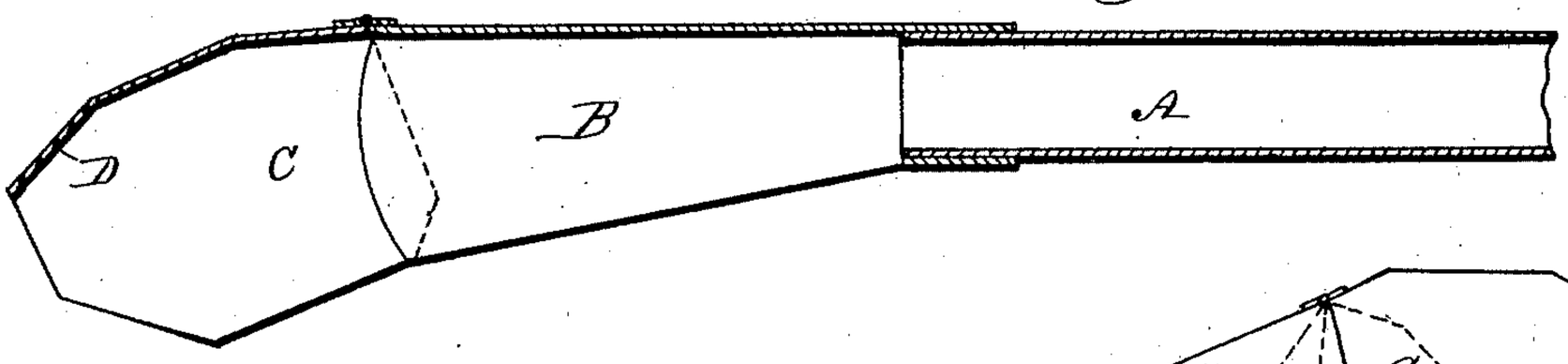
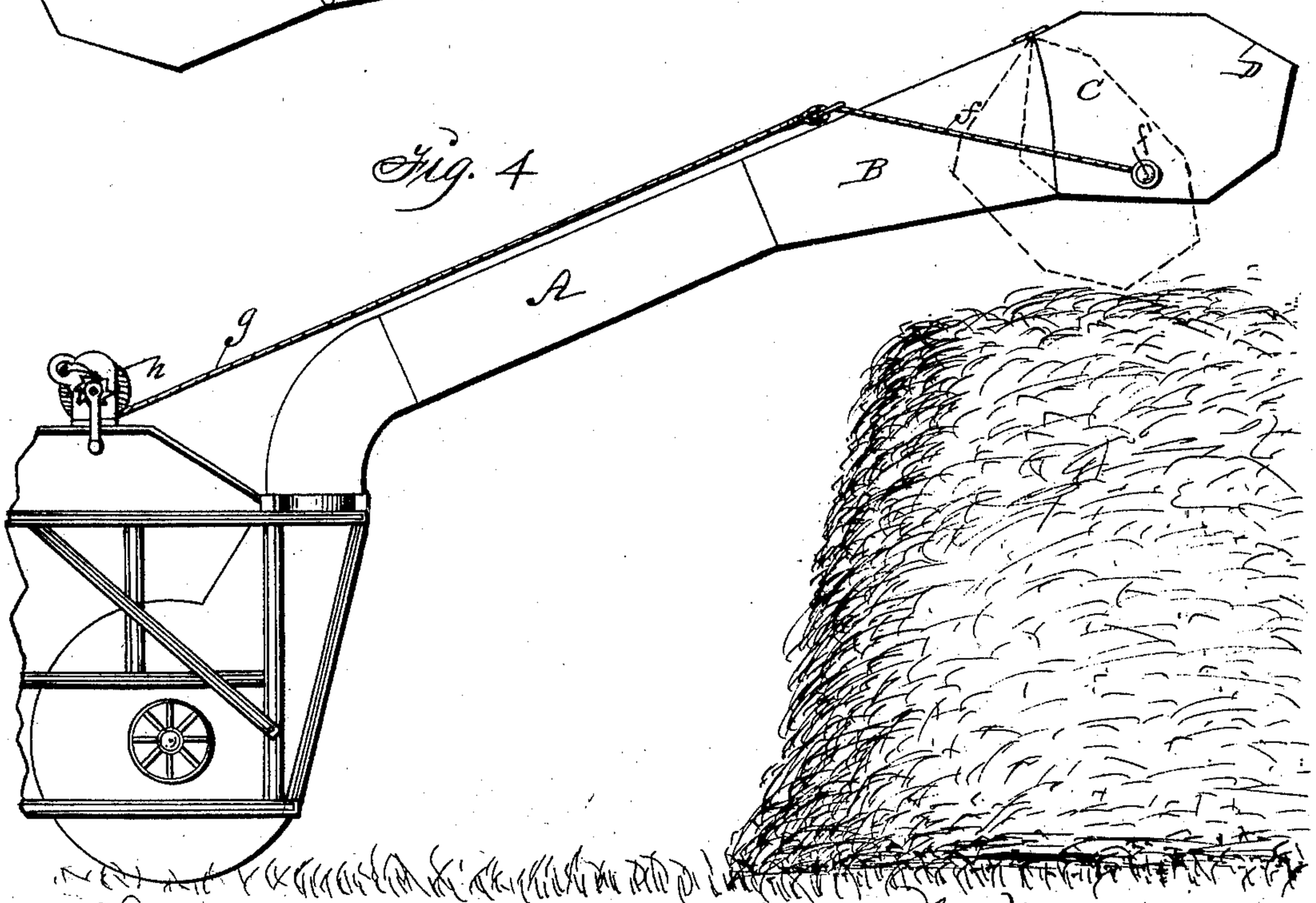


Fig. 4



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UNITED STATES PATENT OFFICE.

GEORGE M. MITCHELL, OF EARLHAM, IOWA.

HOOD FOR PNEUMATIC STRAW-STACKERS.

SPECIFICATION forming part of Letters Patent No. 711,116, dated October 14, 1902.

Application filed March 28, 1902. Serial No. 100,387. (No model.)

To all whom it may concern:

Be it known that I, GEORGE M. MITCHELL, a citizen of the United States, residing at Earlham, in the county of Madison and State of Iowa, have invented a new and useful Adjustable Hood for Pneumatic Straw-Stackers, of which the following is a specification.

My object is to facilitate the labor of stacking straw when forced from a thresher and separator through a tubular conveyer by means of wind-pressure produced by a fan. Heretofore deflectors have been connected with the end of a tubular conveyer in such a manner that its direction of the straw and wind force would cause the straw to be in a packed condition as it came from the conveyer and to fall and accumulate in heaps under its end in such a manner that manual labor became necessary to spread the straw over the top of the stack in order to build a stack that would be bound by successive layers of straw, and when no deflector has been connected with the end of a tubular conveyer the straw would be forced too far and scatter and fall beyond the area of the top of the stack.

My invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view of the enlarged end of the conveyer and the adjustable hood connected therewith. Fig. 2 is a bottom view showing the open space in the enlarged end of the conveyer that allows straw to spread therein and to fall therefrom. Fig. 3 is a longitudinal sectional view. Fig. 4 is a side elevation of the end portion of a separator, showing the tubular conveyer and adjustable hood combined therewith as required for practical use.

The letter A designates the tubular conveyer, that is made of sheet metal and may vary in diameter and length as desired, and B is a tapering and enlarged end portion of the conveyer, open at its bottom and adapted to be fixed to the free end of the conveyer A in the manner shown or in any other suitable way.

C is a sheet-metal hood corresponding in width with the wide end of the part B and hinged thereto, as shown, or in any suitable way that will allow the hood to be adjusted relative thereto and as required to govern the spreading and depositing of straw evenly over the top of a stack as it is forced through the tubular conveyer and discharged at its top.

The rear end of the hood and its bottom are open and its front and free end partially closed in such a manner that the downwardly-inclined front-wall portion D of the hood C will serve as a deflector at all times for directing straw downward after it has been spread in the enlarged end portion B of the conveyer and the hood C hinged thereto.

A rope or wire cable *f* is doubled at its center and its ends fixed to the sides of the hood by means of studs *f'*, fixed to the hood, or in any suitable way, and *g* is a cord or wire cable fixed to the center of the post *f* and extended down to a drum *h*, located at the side of the separator and fixed to the drum in such a manner that the forward and upward motion of the hinged hood can be regulated by simply winding and unwinding the cable. A pawl and ratchet is connected with the drum, as shown, or in any suitable way as required to retain the drum stationary when the hood is properly adjusted for advantageously spreading and depositing straw on a stack.

It is obvious the angle of the hood relative to the tubular conveyer can be readily changed by means of the cable and drum and that while the cable restricts the outward and upward motion of the hood the hood is still free to be operated by force of gravity to descend when its force of gravity is greater than the force of the wind and straw that impinge against it and that the hood is therefore self-adjusting relative to the upward and outward pressure against it.

Having thus described the purpose, construction, and application of my invention, its practical operation and utility will be readily understood by persons familiar with the art to which it pertains, and

What I claim as new, and desire to secure by Letters Patent, is—

1. An enlarged tapering and open-bottomed end for a tubular conveyer for straw-stackers or separators, a hood hinged to the top of the free open and enlarged end and means for

adjusting the hood, arranged and combined to operate in the manner set forth for the purposes stated.

2. An improved tubular conveyer for stacking straw consisting of a portion of uniform diameter adapted to be connected with a separator, a tapering end portion wide at its free end and open at the bottom, a hood hinged to the wide top of the end portion having an open bottom, a rope or wire cable fixed to the sides of the hood and means for adjustably connecting the rope or cable with a portion of the separator, arranged and combined to operate in the manner set forth for the purposes stated.

GEORGE M. MITCHELL.

Witnesses:
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