F. K. TRAXLER.

Dog-Power.

No. 202,679. Patented April 23, 1878.

Fig 1.

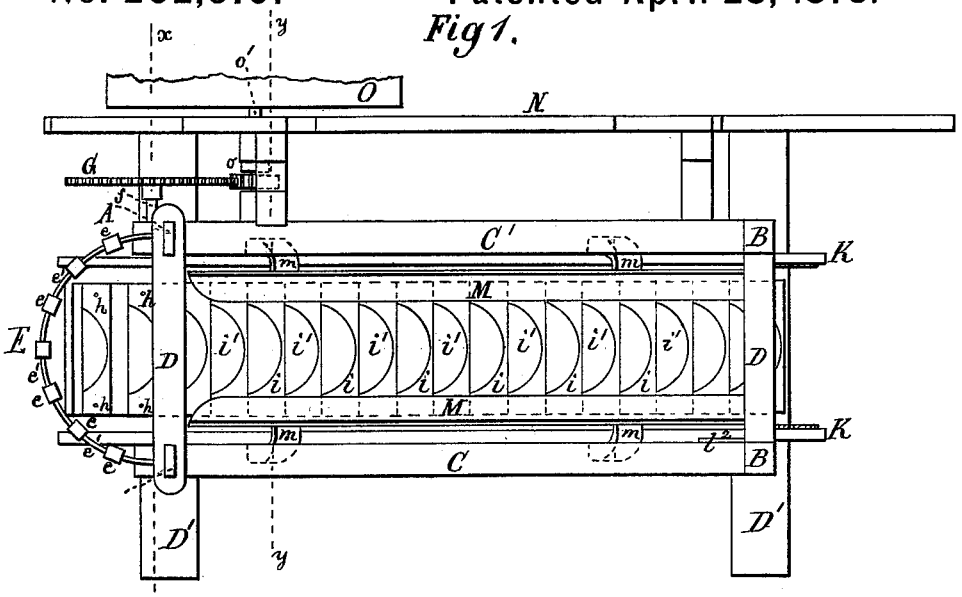
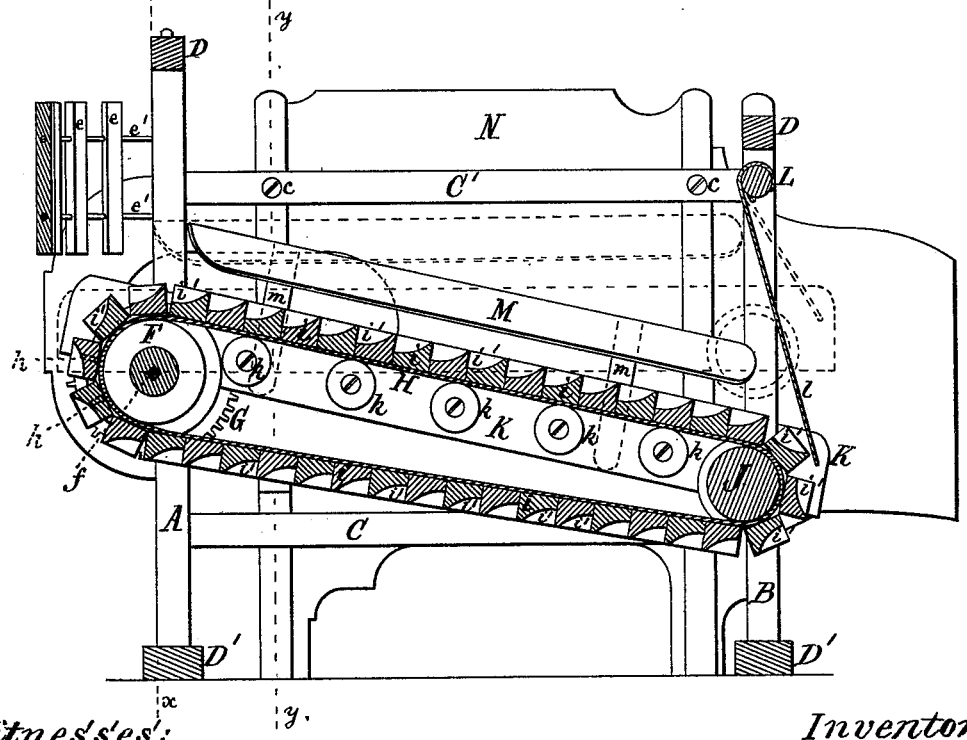


Fig 2.



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2 Sheets—Sheet 2.

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Fig 3.

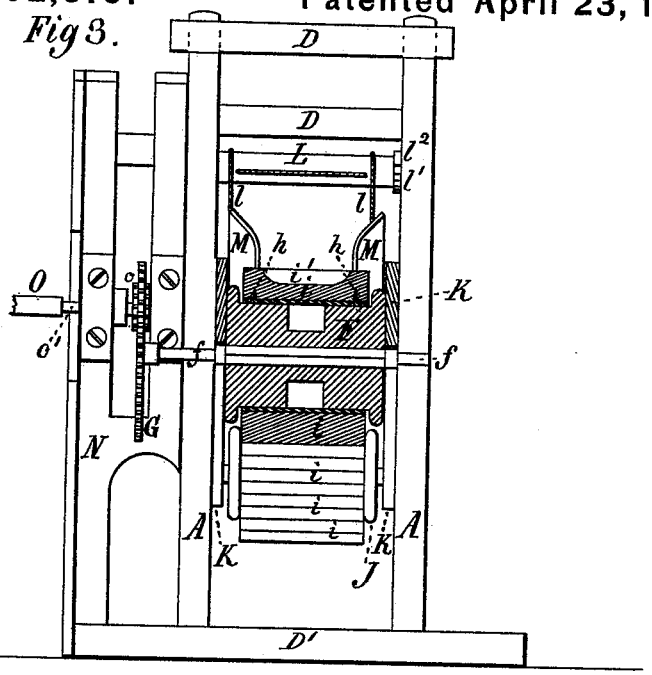
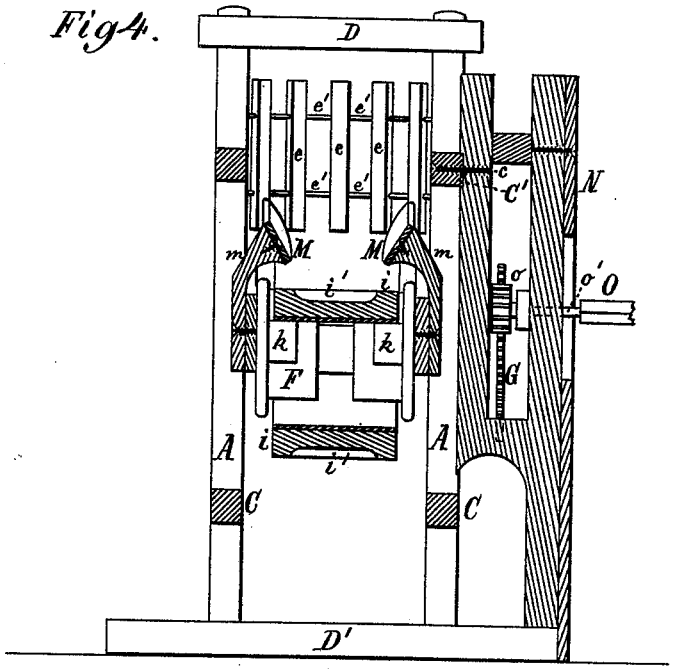


Fig 4.



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his attorneys

UNITED STATES PATENT OFFICE.

FREDERICK K. TRAXLER, OF DANSVILLE, NEW YORK.

IMPROVEMENT IN DOG-POWERS.

Specification forming part of Letters Patent No. **202,679**, dated April 23, 1878; application filed February 13, 1878.

To all whom it may concern:

Be it known that I, FREDERICK K. TRAXLER, of Dansville, in the county of Livingston and State of New York, have invented a new and useful Improvement in Dog-Powers, which improvement is fully set forth in the following specification and drawings, in which latter—

Figure 1 is a top view of my invention as connected with the side frame and driving-shaft of a fanning-mill. Fig. 2 is a vertical central longitudinal section of the same. Fig. 3 is a vertical cross-section of the same in the line *x x* of the preceding figures, looking back; and Fig. 4 is a similar section in the line *y y* of Figs. 1 and 2, looking forward.

My invention consists in certain constructions, combinations, and arrangements of parts, hereinafter fully described and specifically claimed, whereby a dog-power of very simple and novel construction and great efficiency is produced, and which is also especially adapted to be conveniently attached to light agricultural machinery, such as fanning-mills, and is easily adjusted so as to increase or decrease the speed.

In the drawings, A represents the front, and B the rear, posts; C C′, the longitudinal, and D the transverse, connections, and D′ the base connections, of a frame which supports the moving parts of my dog-power. The front part of this frame is provided with a half-round grated guard, E′, consisting of upright slats *e*, pierced and held in position by curved rods *e′*, which are suitably fastened to the posts A. A roller, F, having a geared wheel, G, on its axle *f*, is suitably hung on the posts A, and around this roller and another roller, J, the endless belt or endless apron H, provided with a number of stepping-blocks, *i*, is arranged. The stepping-blocks *i* are provided with depressions *i′*, which are longitudinally and transversely curved. The longitudinal curvature of the block is such that the dog, in walking upon the said blocks, does so with great comfort as long as he walks in a central line and direction; but as soon as he changes his proper position, so that his foot or feet leave the center of the track and get near one of the sides, he will tread upon the rising end parts of the longitudinal curvature, and his feet on that side are deflected sidewise from their usual position, which makes the dog very uncomfortable, and causes him to leave that side and resume the proper course in the center.

The transverse curvature should be constructed to answer precisely the formation of the sole of the dog's feet, so that the dog will not willingly place his feet anywhere else than exactly into the depression *i′*. By this latter curvature I gain two objects—first, the dog does not become foot-sore and incapable of work; and second, the track can be set more inclined, and the dog thereby caused to exert greater power upon the machine.

The stepping-blocks *i* are, near their ends, fastened, by means of central tacks or screws *h*, to the belt H, Fig. 3, which construction permits the belt H to assume the same shape in going over its cylindrical supports as it would were it a free belt, as is plainly seen in Fig. 2, thereby avoiding the destructive short bends of the belt at the joints of the stepping-blocks, to which the belt is subjected when the stepping-block is fastened near both its edges (front and rear) to the belt. The belt H is stretched over the roller J, which is at the rear end of the frame, and hung between two swinging side boards, K, which, in practice, will be pivoted to the shaft *f* on both sides of the roller F and between the posts A.

The inner sides of the boards K are provided with rollers *k*, over which the upper part of the belt H runs, and by which it is supported when the dog is resting with his weight upon it. The swinging ends of the boards K are suspended by ropes or chains *l*, which are fastened to a windlass, L, hung above to the posts B, so that the said boards and the endless platform with them may be elevated to any desired inclination, or even to a horizontal position, as indicated by dotted lines in Fig. 2. A ratchet-wheel, l^1, and pawl l^2 serve to retain the platform in its adjusted position, and prevent the windlass L from turning backward.

Two inclined boards, M, fastened by means of arms *m* to the boards K, serve as guides to the legs of the dog, and prevent the dog from swaying sidewise and becoming caught between the edges of the belt H and the side boards K. The connection C′ of the frame is placed at a proper height, and provided with bolts or wood-screws *c*, in order that it may

be readily fastened to the side N of a fanning-mill, and thus be in working position; and to further this end the wheel G is so fastened on the shaft *f* that, upon the coupling of the fanning-mill with the dog-power, it gears into the pinion *o* of the shaft *o'* of the fan O, and the operation may at once begin.

It will be understood that as the inclination of the belt H is increased or diminished the power of the dog and the speed of the machine will be correspondingly increased or diminished, and that when the belt H is level the machine can only be moved by the muscular power of the dog, and without the power of gravity due to the weight of the dog, which comes into play when the belt is inclined.

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

1. In a dog-power, the combination of the adjustable belt or platform H, having the blocks *i*, the roller F, gear-wheels G and *o*, fan O, swinging roller J, boards K, having rollers *k*, and windlass L, substantially as described.

2. The combination of the guard-boards M, swinging boards K, and driving-belt or platform H, substantially as and for the purpose set forth.

3. The combination of the within-described dog-power, having connection C', side N of a fanning-mill, and removable coupling bolts or screws *c*, whereby the said dog-power and fanning-mill are coupled together, so as to be in operating condition with respect to one another, and can be readily uncoupled at will, substantially as shown and described.

4. In a dog-power, the combination of the driving-belt H, having stepping-blocks *i*, provided with longitudinally and transversely curved depressions *i'*, the longitudinal curvature of which causes the dog to tread in the center of the said blocks *i*, and the transverse curvature of which corresponds with the shape of the sole of the dog's feet, substantially as and for the purpose set forth.

Witness my hand in the matter of my application for a patent for a dog-power this 8th day of February, A. D. 1878.

FREDERICK K. TRAXLER.

Witnesses:

D. H. FOSTER,

FRANKLIN FRAXLER.