

No. 695,986.

Patented Mar. 25, 1902.

J. H. WILSON.
PAINT DIP FOR WHEELS.

(Application filed May 24, 1901.)

(No Model.)

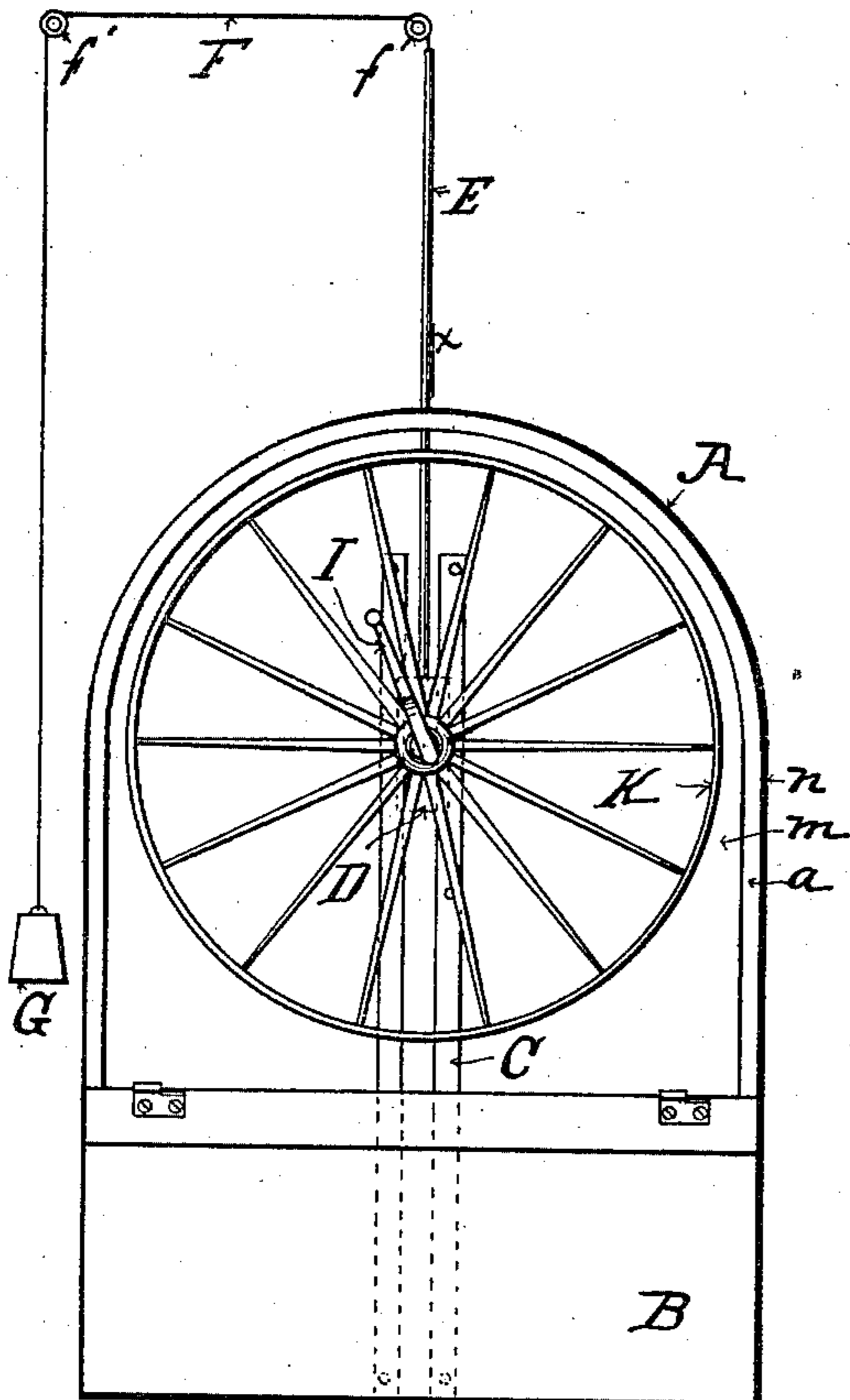


Fig. 1.

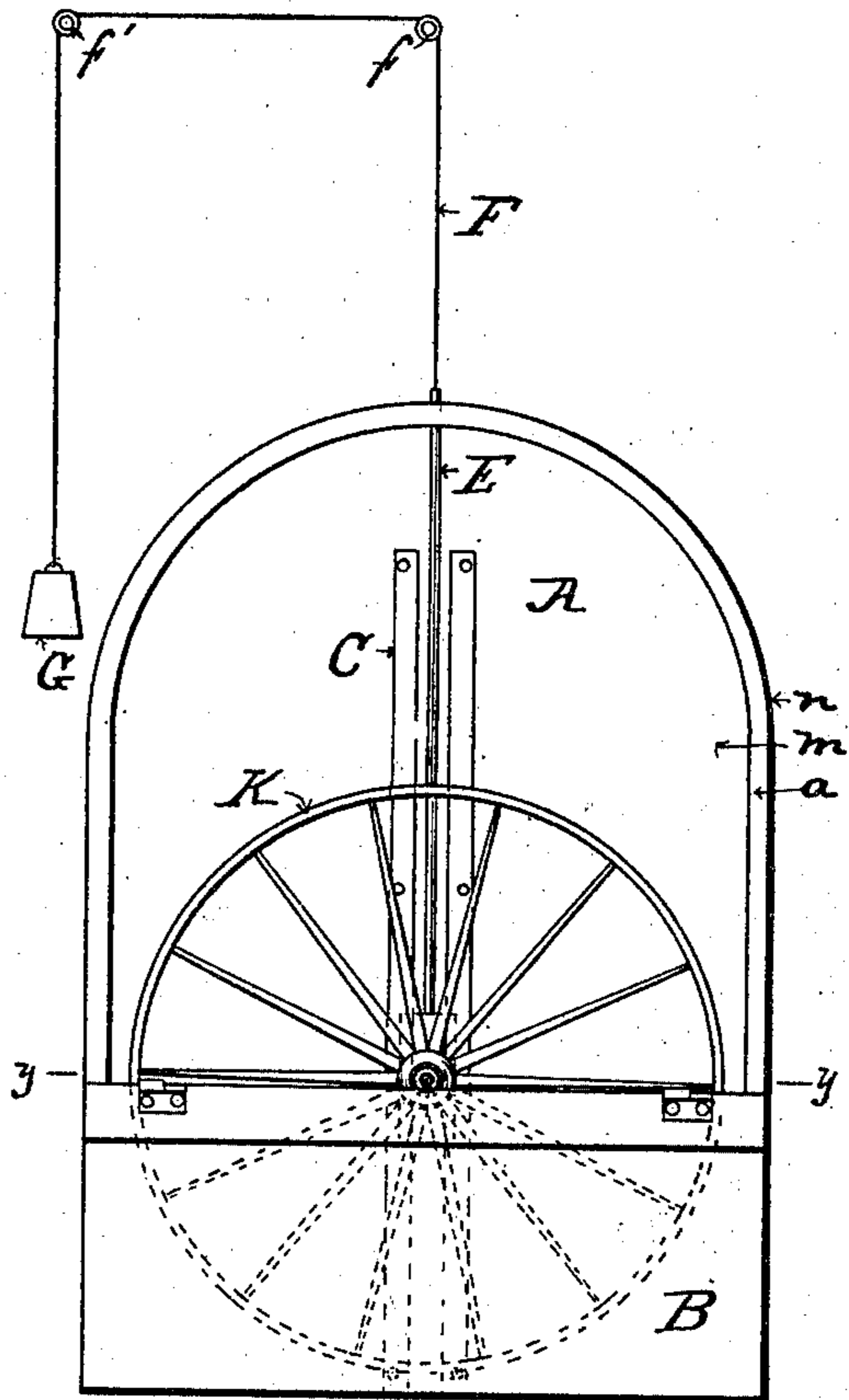


Fig. 2.

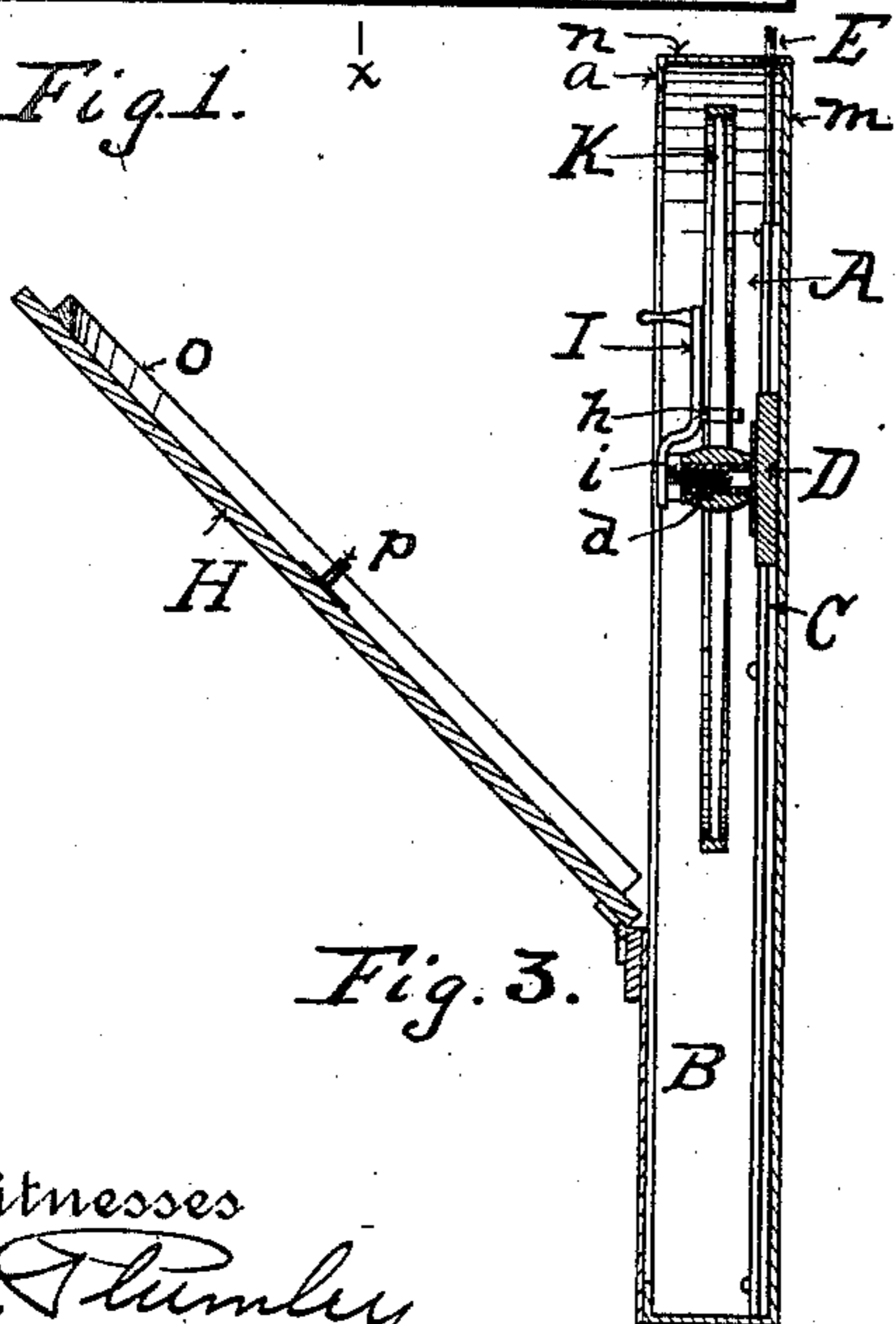


Fig. 3.

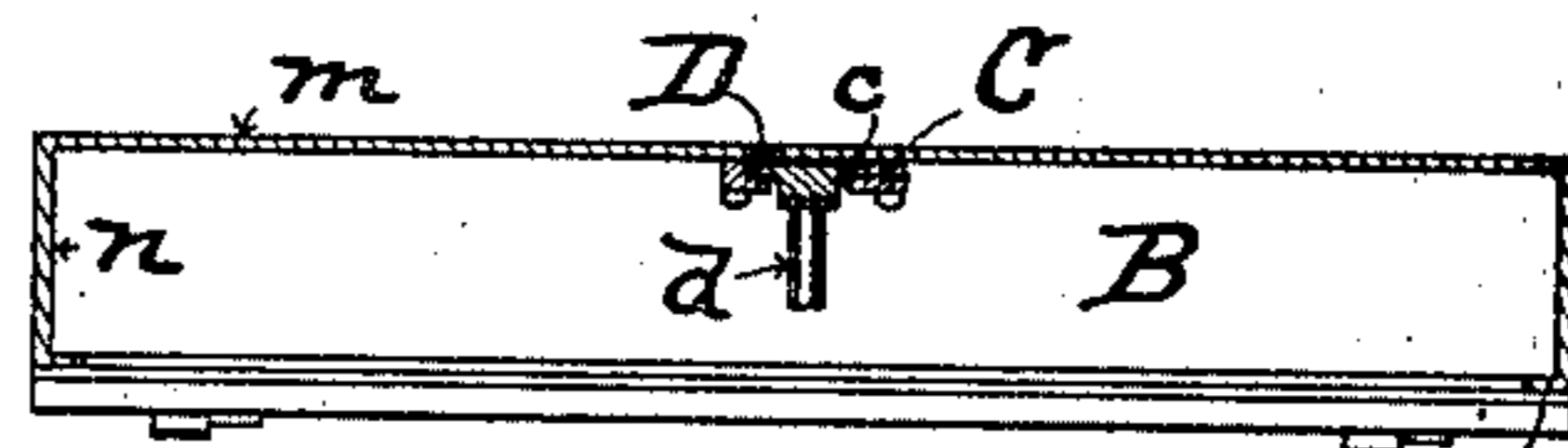


Fig. 4.

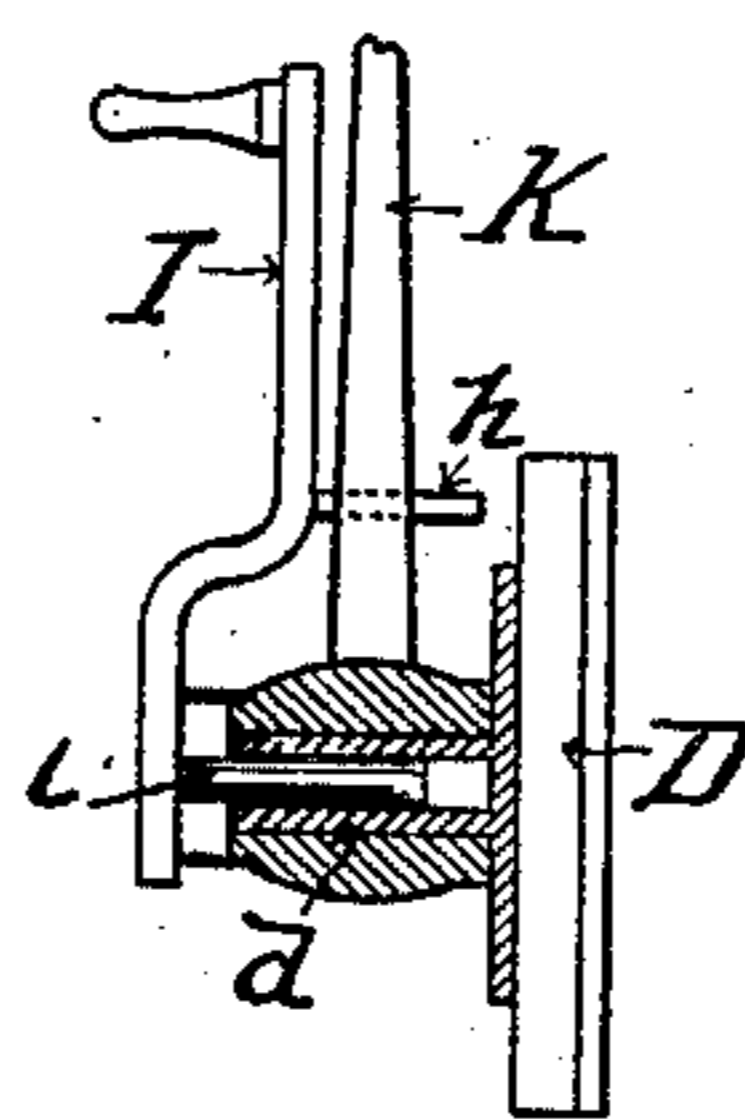


Fig. 5.

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UNITED STATES PATENT OFFICE.

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PAINT-DIP FOR WHEELS.

SPECIFICATION forming part of Letters Patent No. 695,986, dated March 25, 1902.

Application filed May 24, 1901. Serial No. 61,724. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. WILSON, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Paint-Dips for Wheels, of which the following is a full, clear, and exact description.

My invention relates to wheel paint-dips, and more especially to that class of dips wherein the wheels are immersed by dipping them vertically into the dip instead of longitudinally.

The object of my invention is to provide means for uniformly and quickly applying paint to wheels without the use of a paint-brush and without waste of paint.

An additional object has been to provide a simple device that would not easily get out of order and would be cheap to produce and operate.

The objects above set forth I am able to accomplish by means of the device represented in the accompanying drawings, in which similar letters of reference refer to similar parts throughout the several views.

Figure 1 is a front elevation of my device, showing a wheel raised out of the dip, the draining-cover being removed to show the construction more clearly. Fig. 2 is a similar view to that of Fig. 1, but showing a wheel in an immersed position in the dip. Fig. 3 is a sectional view taken on the line $x x$ of Fig. 1 and also showing the draining-cover in section. Fig. 4 is a sectional view taken on the line $y y$ of Fig. 2, the wheel shown in Fig. 2 being omitted. Fig. 5 is an enlarged section in the same plane as Fig. 3, showing the crank used for revolving the wheel after being immersed in the dip and its method of application.

K is a wheel.

A is a hood which is preferably made, as shown, in the form of a semicylindrical shell, consisting of a back m and a rim n . Upon the periphery or edge of the rim n a narrow flange a may be placed for preventing the paint from flying outside the hood A when the wheel is revolved. In practice, however, I find that this flange may be dispensed with

without danger of having much, if any, of the paint fly outside the hood. The hood A is supported over a dip or paint-tank B, which is preferably rectangular in shape and deep enough so that a wheel can be at least half submerged therein. The dip B is filled with paint of any desired quality or color.

C is a standard suitably secured to the center of the back wall m of the hood A. The standard C may be made of any desired length, but must be sufficiently long to allow the wheel when guided by the block or plate D to be semisubmerged in the dip B and to be fully withdrawn from the dip, so that it will be free from the paint in the dip. The standard C is so constructed that it will form a T-slot c , having its outside opening in the front thereof.

D is a traveling plate or block of any suitable material adapted to fit in and travel up and down in the T-slot c of the standard C. The plate D is provided with a hollow right-angled projection or lug d , adapted to fit into the hub of the wheel. To the plate D is secured a stiff guide rod or bar E. To the upper end of the guide rod or bar E is secured a chain or rope F, which passes over pulleys f and f' . The chain or rope F is attached at its lower end to a weight G. As is evident, any other appropriate means for raising and lowering said wheel may be used, and I do not care to limit myself to the specific means above described.

H is a support or draining-cover hinged to the top of the dip B or bottom of the hood A, capable of being inclined at any convenient angle. As is evident, this support H is so constructed that it may be used as a cover over the front of the hood A when the device is not in use, and thus prevent much of the drying and evaporation of the paint in the dip B that would take place were the front of the hood left open and the paint in the dip exposed to the outside atmosphere. The cover H is provided with a flange o , which fits within the flange a , and it may be provided with a lug or pin p to engage in the hub of a wheel when a wheel is held on the cover to drain. The cover can be readily unhinged, as shown, and it requires no support, as the operator

will hold it at the desired angle for the short period of time required to drain the article painted.

I is a crank provided with a right-angled lug *i*, adapted to fit into the hollow lug *d*. The crank I is also provided with a right-angled lug *h*, so positioned that when the lug *i* is fitted into the lug *d* it will pass between the spokes of the wheel. When the crank I is so attached, the wheel can be revolved as rapidly as is desired.

Having thus described the several parts of my device, I will now describe its method of operation.

The hub of the wheel K, which is to be painted, is secured to the lug *d* and the plate D is near the upper end of the standard C. The weight G is then lifted and the wheel K immersed in the dip B. If the dip will allow the wheel to be only semi-immersed, then it is revolved until it is thoroughly coated with the paint in the dip. After the wheel is coated with paint it is lifted out of the paint by pulling down the weight G. The crank I is then applied, so that the lug *i* fits into the hollow lug *d* and the lug *h* passes between the spokes of the wheel. By revolving the crank so applied the wheel is rapidly revolved and the surplus paint is thrown off, so that it strikes the side walls and top of the hood A and then flows back into the dip B, thus preventing waste of paint. The surplus paint being thus removed, the crank I is removed and the wheel is rested on the inclined draining-cover H. If there is still any surplus paint on the wheel, it will flow off and drain back by means of the support H into the dip B. The painted wheel can then be removed and another painted, as above described. By means of the above device wheels can be more easily, quickly, uniformly, and cheaply painted than has ever before been possible by the use of prior devices.

This device is largely and chiefly intended to be used in manufacturing agricultural machinery and heavy wagons, where paint for protection rather than paint for ornamentation is desired, and it is especially efficient with heavy metal wheels, which could not be handled in any of the old devices.

Having thus described my invention and its method of operation, what I claim, and desire to secure by Letters Patent, is—

1. In a wheel-painting device, the combination with a vertical paint-dip of a semicylindrical hood, positioned above and over said dip, a standard secured to said hood, a traveling plate moving in said standard, means

for securing the wheel to said plate, and suitable means for raising and lowering the wheel into and out of said paint-dip, for the purposes set forth.

2. In a wheel-painting device, the combination with a vertical paint-dip of a semicylindrical hood positioned above and over said dip, a standard secured to said hood, a T-slot formed in said standard, a traveling plate adapted to move up and down in said T-slot, a hollow lug secured at right angles to said plate, suitable means for raising and lowering said plate, so that when a wheel is attached thereto, it can be submerged in and drawn out of said paint-dip, and a crank adapted to engage with the lug on said plate and between the spokes of the wheel whereby the wheel after being submerged in the paint can be rapidly revolved and the surplus paint caught by the hood and conducted back into the dip, as and for the purposes set forth.

3. In a wheel-painting device, the combination with a vertical paint-dip of a semicylindrical hood positioned above and over said dip, a standard secured to said hood, a traveling plate moving in said standard, means for securing the wheel to said plate, suitable means for raising and lowering the wheel into and out of said dip, suitable means for revolving said wheel after being immersed in said dip, and an inclined support for receiving said wheel after being thus revolved, which support is adapted also for a cover over the front of the hood as and for the purposes set forth.

4. In a wheel-painting device, the combination with a vertical paint-dip of a semicylindrical hood positioned above and over said dip, a standard secured to said hood, a traveling plate moving up and down in a slot formed in said standard, a guide rod or bar attached to said plate, a rope attached to said guide-bar, pulleys over which said rope runs, a weight attached to the end of said rope, suitable means for securing the wheel to said plate, and suitable means for revolving said wheel after it is immersed in said dip, substantially as specified.

In witness whereof I have hereunto subscribed my name, in the presence of two witnesses, this 2d day of May, 1901, at the city of Buffalo, in the county of Erie and State of New York.

JOSEPH H. WILSON.

Witnesses:

MEDFORD B. FARRINGTON,
D. B. TUTTLE.