(No Model.)

W. R. NIGHTINGALE.

REVOLVING CLEANING BRUSH.

No. 518,352. Patented Apr. 17, 1894.

Fig. 1.

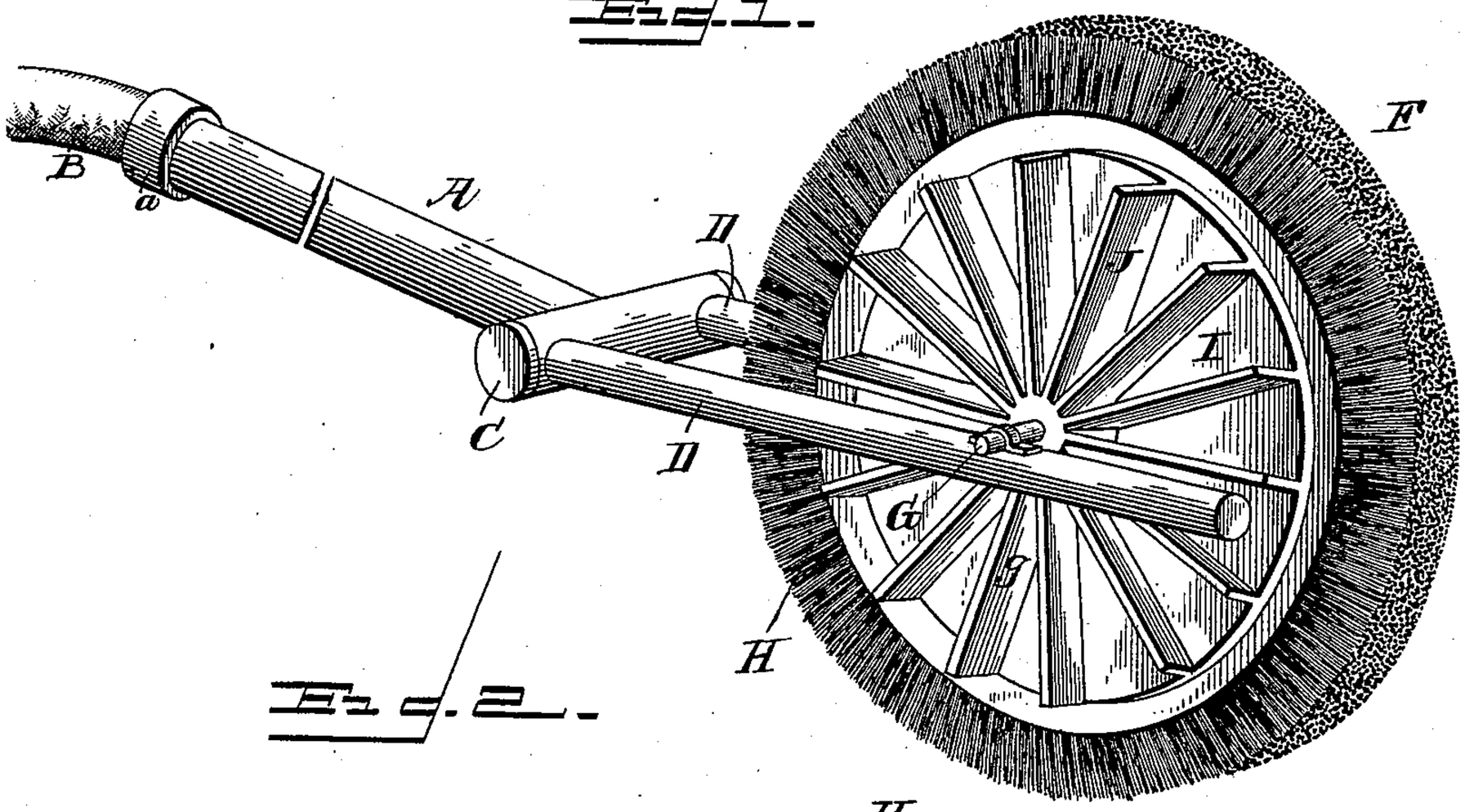


Fig. 2.

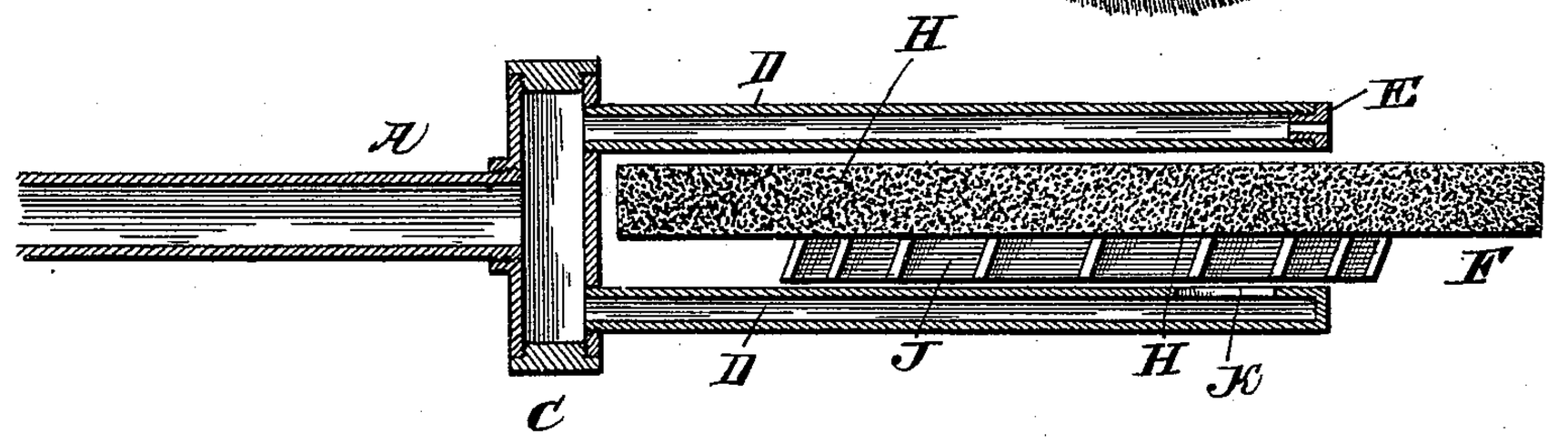
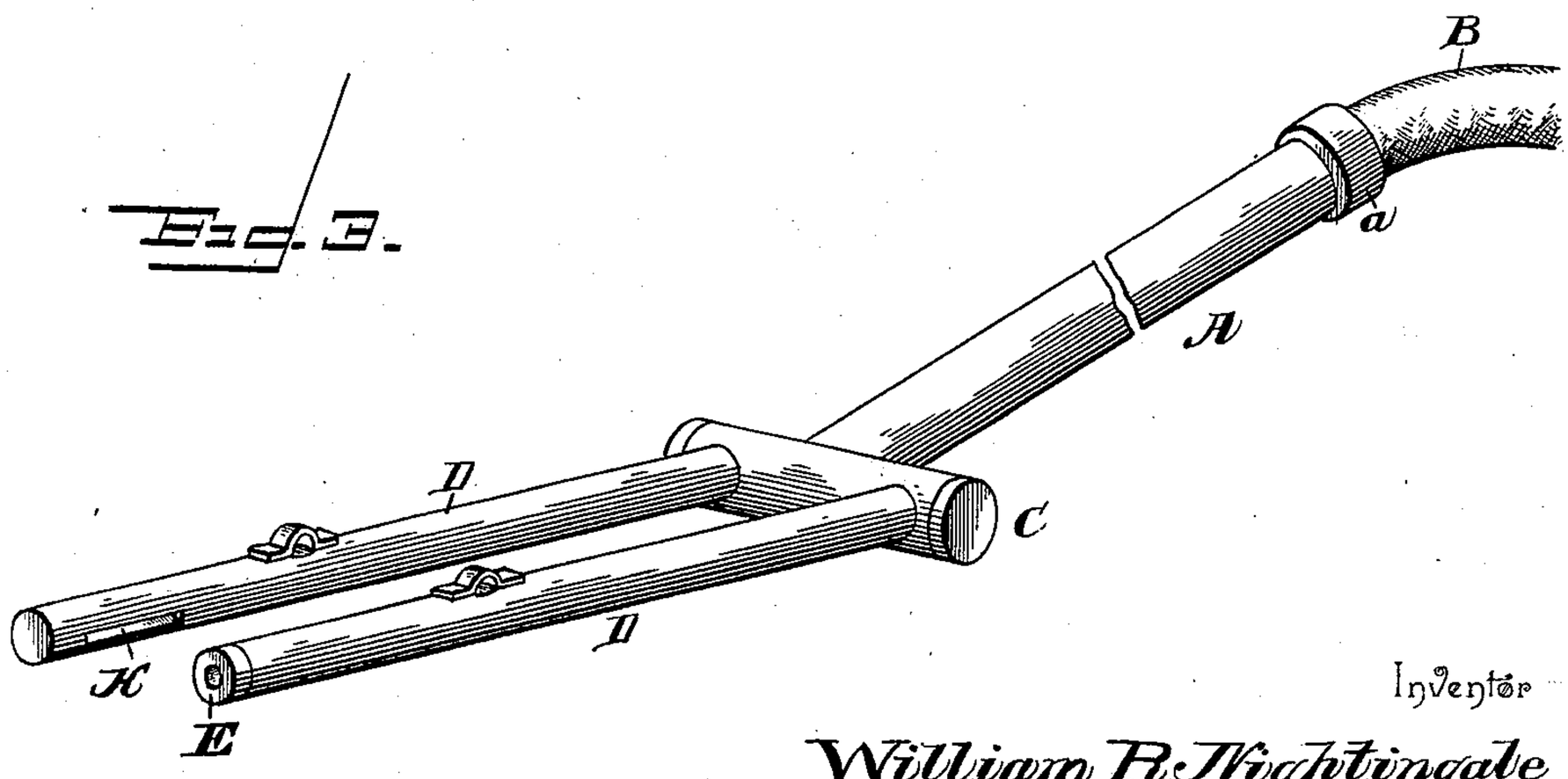


Fig. 3.



Witnesses
E. K. Stewart.
D. C. Walkington.

Inventor
William R. Nightingale
By his Attorneys.
C. A. Snow & Co.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM R. NIGHTINGALE, OF VALLEY, NEBRASKA, ASSIGNOR OF ONE-HALF TO JOHN H. SIMONTON, OF SAME PLACE.

REVOLVING CLEANING-BRUSH.

SPECIFICATION forming part of Letters Patent No. 518,352, dated April 17, 1894.

Application filed November 29, 1893. Serial No. 492,384. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. NIGHTINGALE, a citizen of the United States, residing at Valley, in the county of Douglas and State of Nebraska, have invented a new and useful Revolving Cleaning-Brush, of which the following is a specification.

This invention relates to revolving cleaning brushes; and it has for its object to provide an improved brush of this character, which, being impelled by a jet of water, shall be especially useful for cleaning all kinds of vehicles, such as street and railway cars, buggies, carriages, &c.

To this end the main and primary object of the present invention is to provide an improved automatically rotated rotary brush, which shall operate in conjunction with a cleaning jet of water to complete a washer or cleaning device simple in construction and effective in operation.

With these and other objects in view which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

In the drawings:—Figure 1 is a perspective view of a cleaning device constructed in accordance with this invention. Fig. 2 is a horizontal sectional view thereof. Fig. 3 is a detail in perspective of the pipe bearing frame, with the revolving brush removed.

Referring to the accompanying drawings, A represents a pipe handle constructed of a suitable length of piping so as to convey the necessary stream of water for the operation of the device, and is coupled at one end as at *a*, to an ordinary hose B. To the other end of the pipe handle A, is coupled an ordinary T-coupling C, from the opposite ends of which coupling extend the parallel branch jet pipes D, of a size smaller than the diameter of the supply or handle pipe A, to concentrate the pressure of the stream. One of said jet pipes has removably fitted into the extreme outer end thereof the perforated jet plug E, which provides for constantly jetting a stream of water onto the vehicle or other object being washed, thereby keeping the dirt or dust wet in order to allow the revolving brush F, to effectively remove the dirt or dust from the object being washed without injury to the paint or other finish thereof. The parallel jet pipes D, form a bearing yoke in which is journaled the revolving brush F, and said brush F, is mounted on the spindle or axle G, suitably journaled as at *g*, to the opposite parallel jet pipes D. The said revolving cleaning brush F, is provided with a brush or bristle periphery H, which rotates in contact with the object being washed, and in very close proximity to the jet of water issuing from the perforated jet plug E, in one end of one of the jet pipes D.

The revolving cleaning brush F, has suitably attached to one side thereof the water wheel disk I, which is provided with a radial series of off-standing and angularly disposed blades or buckets J. The blades or buckets J projected laterally from one side of the revolving brush, or at least from the water wheel disk secured thereto, are designed to receive a jet of water from the side jet opening K, formed in the inner side of the branch jet pipe next to the water wheel and near the outer end thereof. The side jet opening K, formed near the outer end of one of the branch jet pipes D, is disposed at an angle so as to jet a stream of water against the blades or buckets of the water wheel disk at such an angle as will cause the cleaning brush to be rapidly rotated, and thereby render the same especially useful for cleaning vehicles and other similar objects.

From the foregoing it will be apparent that when water is admitted to the supply or pipe handle A, from the hose B, one of said branch jet pipes D, will direct a jet of water against the brush water wheel and cause the same to revolve, while the other jet pipe will jet a stream of water against the object against which the brush rotates.

Many advantages can be attributed to the device herein-described, and I will have it understood that changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a cleaning device of the class described, a piping frame having separate jet pipes one of which is provided with a jet opening at one side, and the other of which is provided with an end jet opening and a revolving cleaning brush having a water wheel at one side and disposed next to said side jet opening, of one of said jet pipes substantially as set forth.

2. In a cleaning device of the class described, a piping frame having separate parallel jet pipes, one of which is provided with a jet opening at one side, a perforated jet plug removably fitted into one end of the other jet pipe and a revolving cleaning brush mounted on a spindle journaled on the jet pipes, and having a radial series of off-standing blades or buckets at one side adapted to be disposed next to said side jet opening, substantially as set forth.

3. In a cleaning device of the class described, a pipe handle adapted to be coupled with a hose or other water supply, parallel jet pipes coupled to one end of said pipe handle, one of said jet pipes having an end jet opening and the other of which is provided at one side near its outer end with a side jet opening disposed at an angle, a revolving cleaning brush journaled between said jet pipes and having a brush periphery, and a water wheel disk arranged at one side of said brush and having a radial series of off-standing and angularly disposed blades or buckets, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM R. NIGHTINGALE.

Witnesses:
E. S. FLOR,
JOHN H. SIMONTON.