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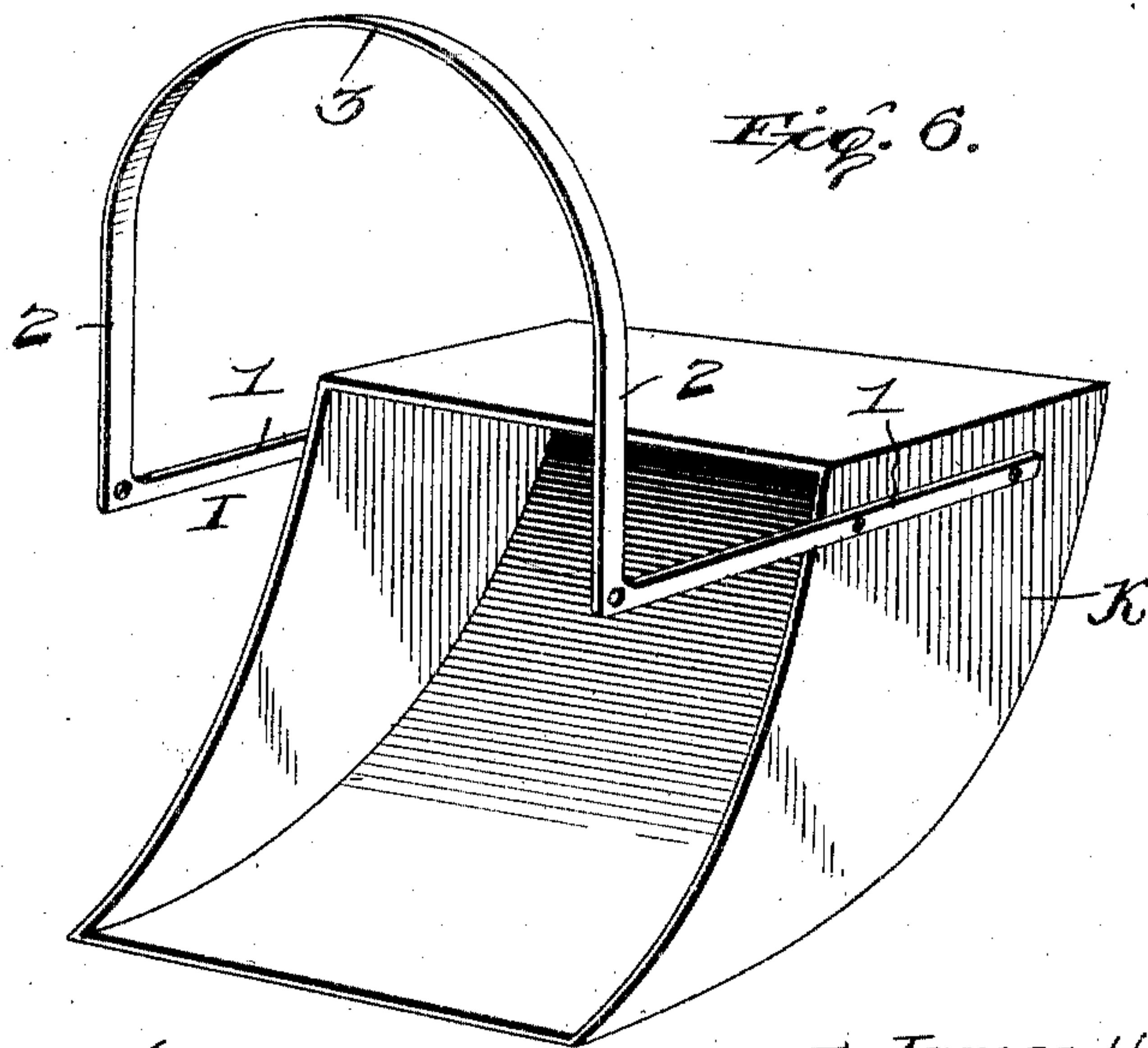
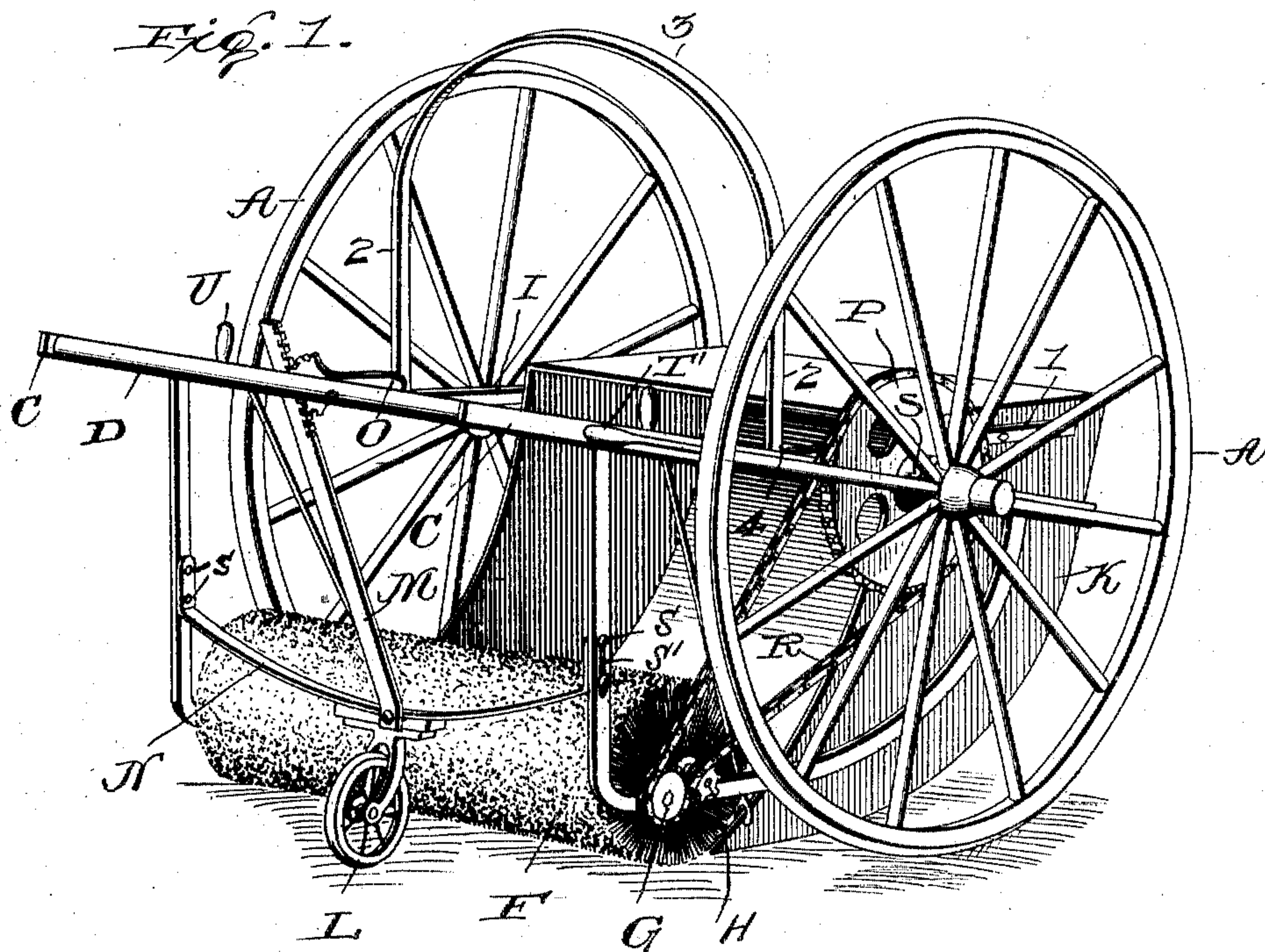
PATENTED DEC. 13, 1904.

J. H. BARAGAR.
STREET SWEEPER.

APPLICATION FILED JAN. 16, 1904.

NO MODEL.

3 SHEETS—SHEET 1.



WITNESSES:

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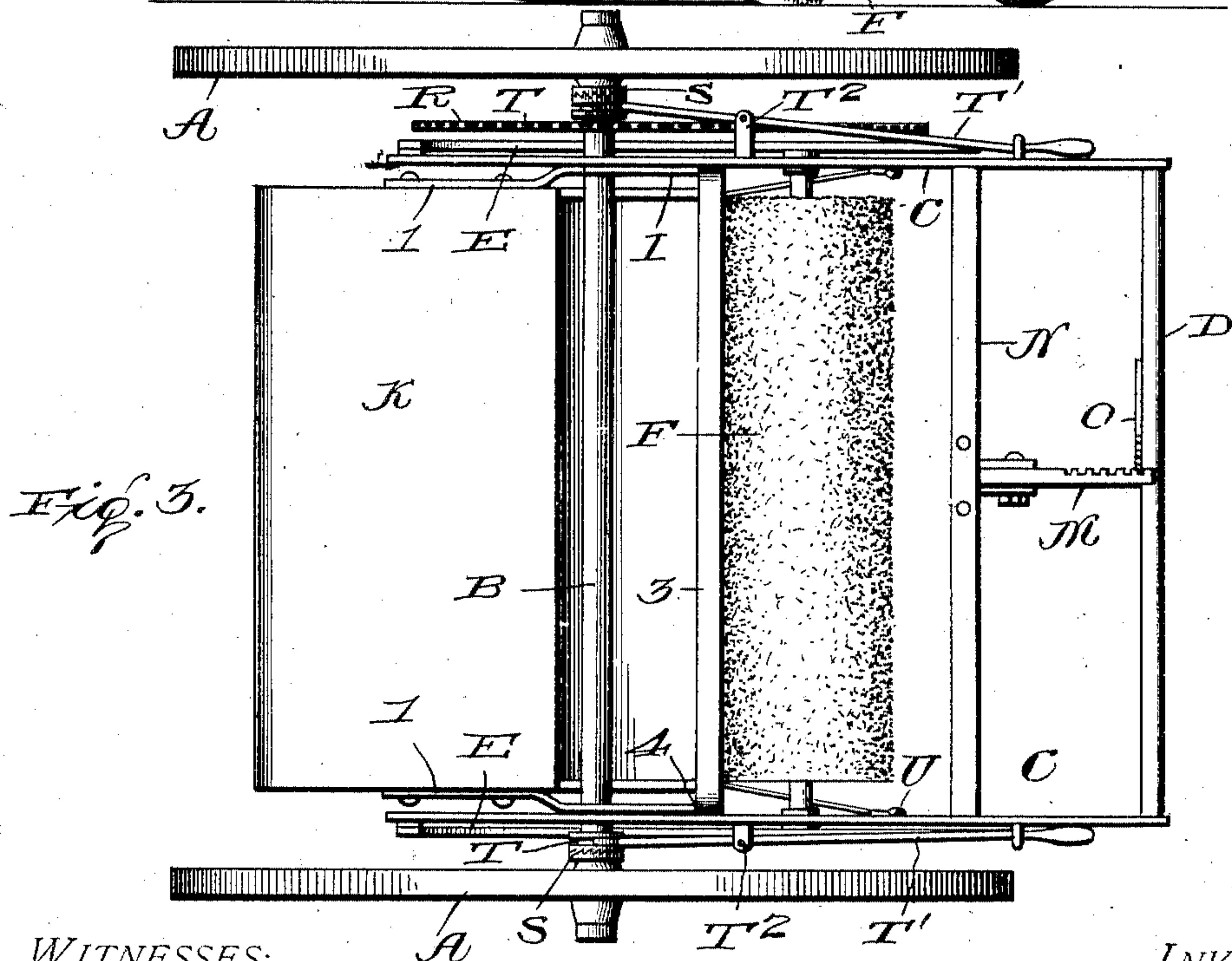
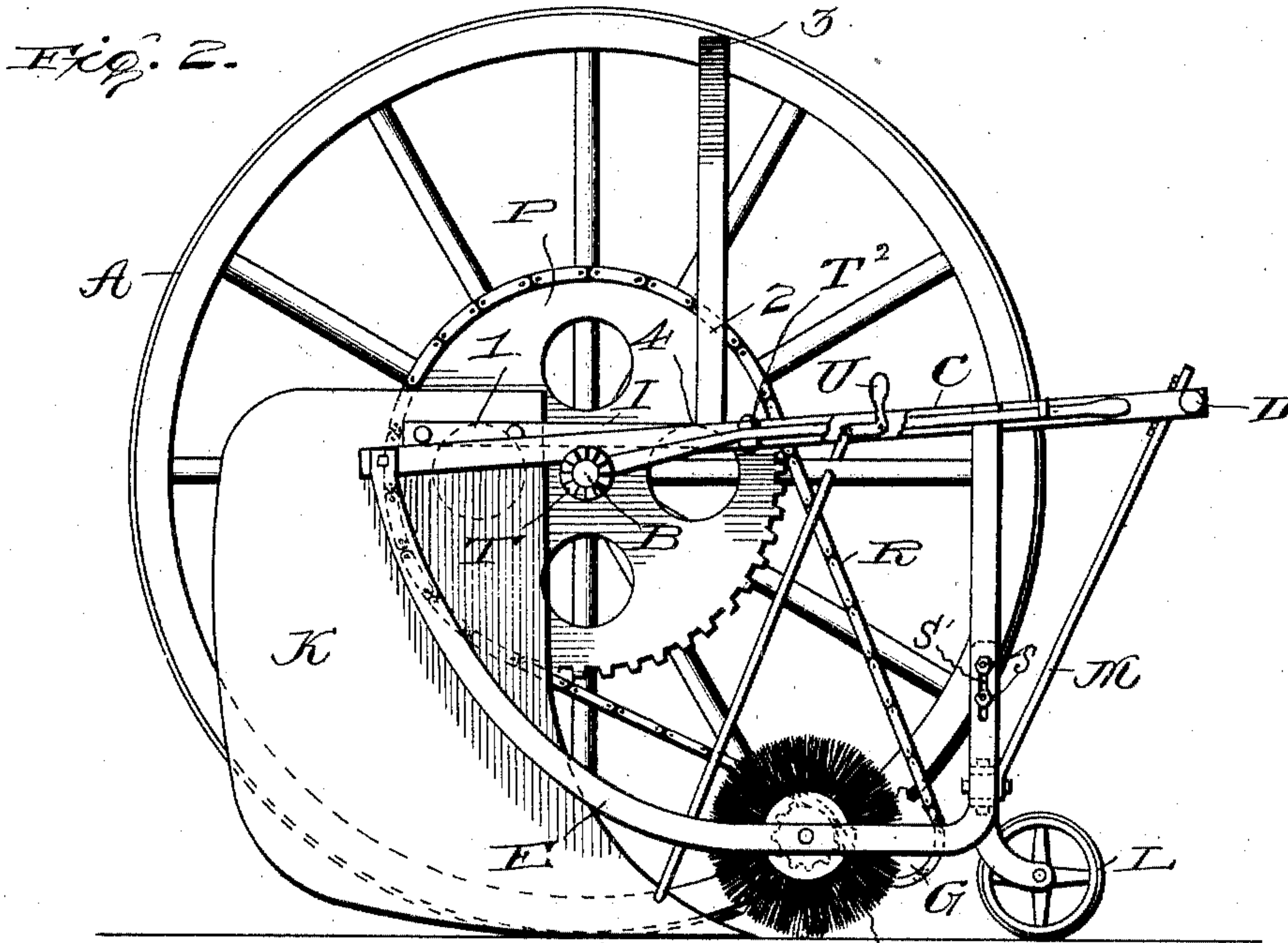
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3 SHEETS—SHEET 2.



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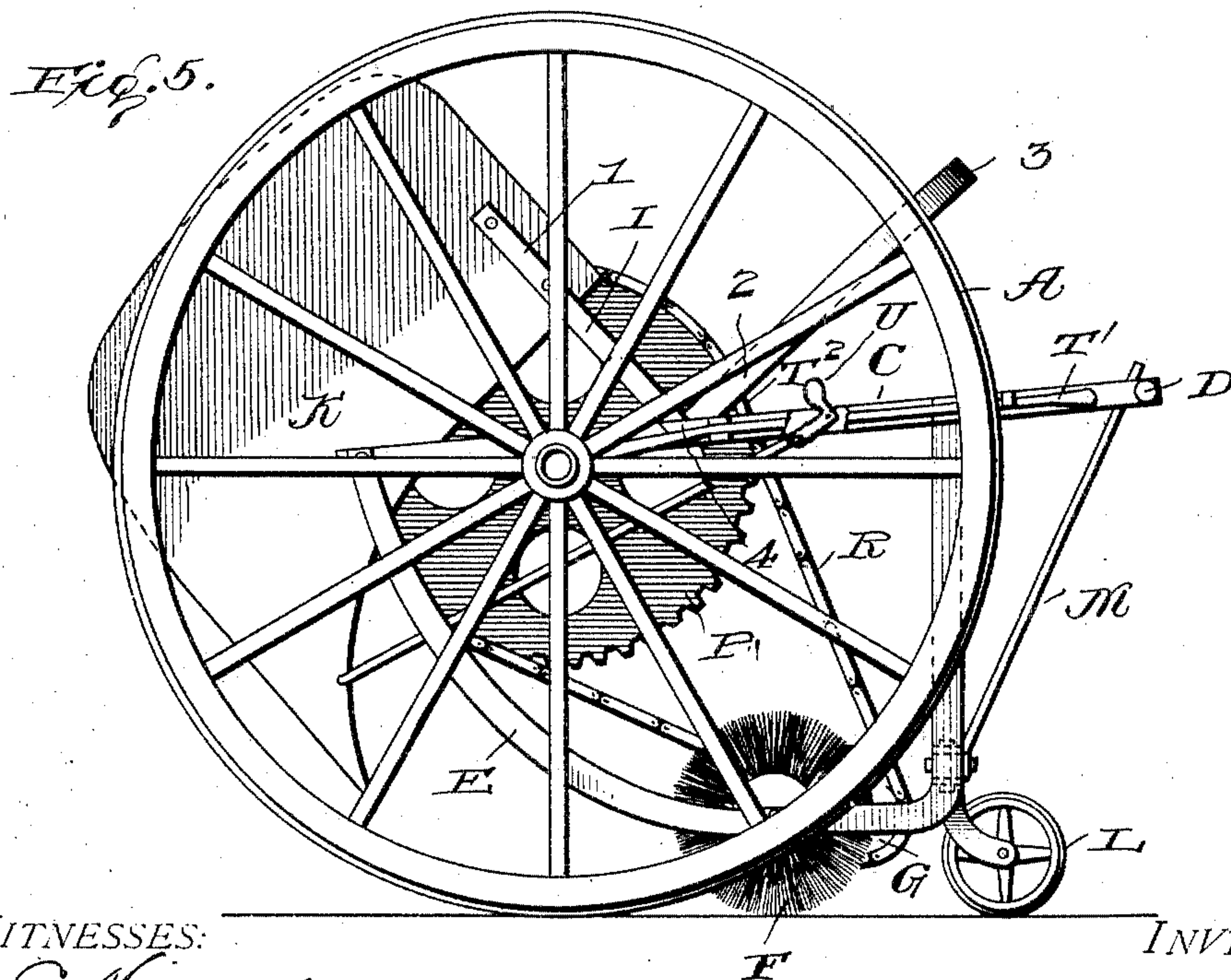
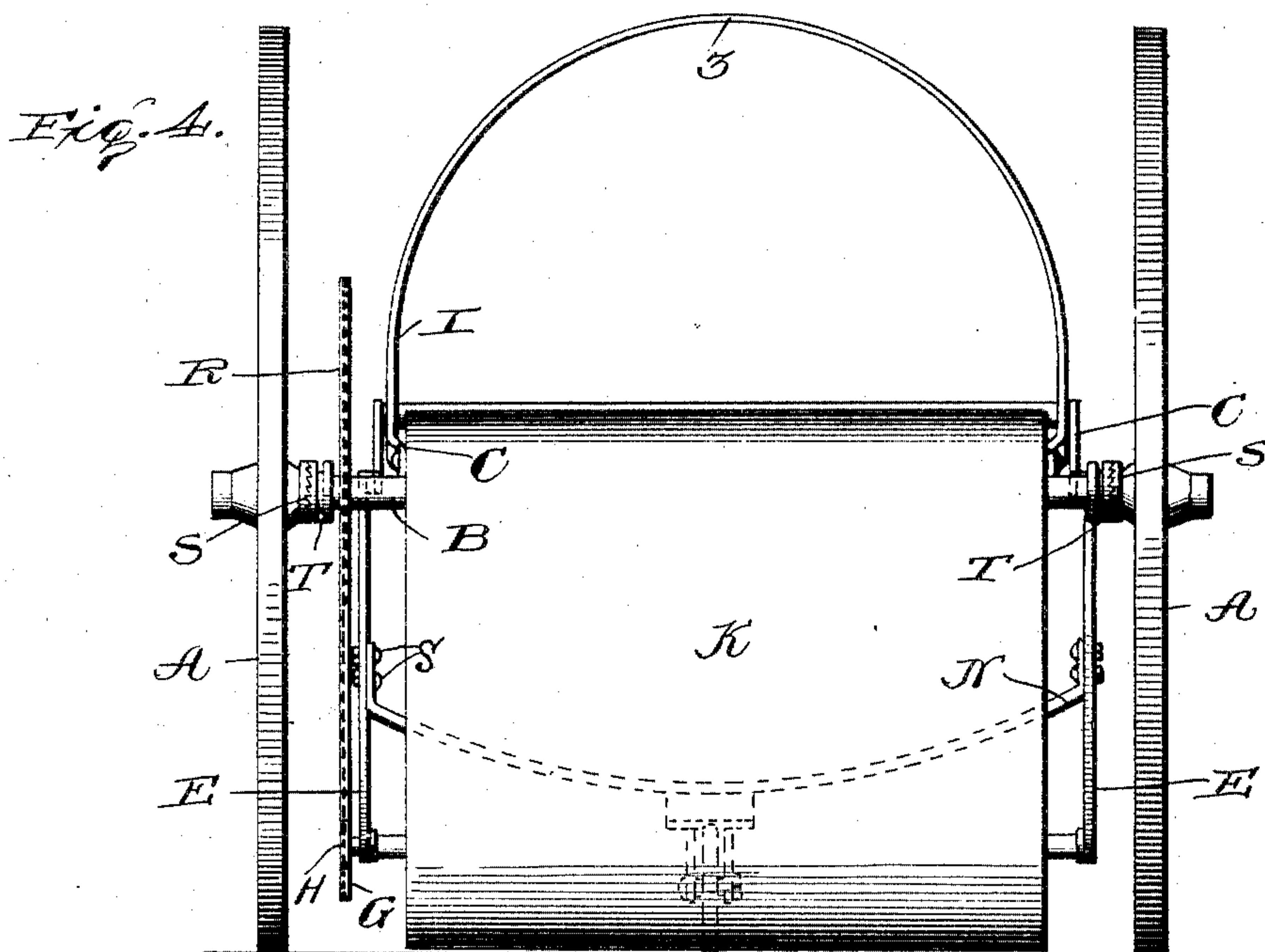
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J. H. BARAGAR.
STREET SWEEPER.

APPLICATION FILED JAN. 16, 1904.

NO MODEL.

3 SHEETS—SHEET 3.



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UNITED STATES PATENT OFFICE.

JAMES H. BARAGAR, OF LAPORTE, INDIANA.

STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 777,175, dated December 13, 1904.

Application filed January 16, 1904. Serial No. 189,335. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. BARAGAR, a citizen of the United States, residing at Laporte, in the county of Laporte and State of Indiana, have invented new and useful Improvements in Street-Sweepers, of which the following is a specification.

This invention relates to street-sweeping machines, and has particular relation to machines of that type which are propelled and operated by manual power.

The object of the invention is to provide a machine of the type specified which will be of simple construction, strong and durable, and one that can be efficiently operated with the expenditure of a small amount of manual labor.

With this and other objects in view the invention comprises a machine adapted to be propelled and operated by hand, and consisting of a main frame mounted upon the wheel-axle, a lower or supplemental frame depending from said main frame, said lower frame carrying the broom and gearing whereby said broom is revolved, a frame for supporting and carrying the dirt-receptacle, said frame being pivotally connected to the main frame, whereby the receptacle carried thereby may be readily dumped, a means for adjusting the machine with relation to the surface being swept, and a means for causing the axle to be rotated when one or both wheels are being revolved.

In the accompanying drawings, wherein like characters of reference indicate corresponding parts, Figure 1 is a perspective view of the machine. Fig. 2 is a side elevation, one of the wheels being removed. Fig. 3 is a top plan view. Fig. 4 is a front elevation. Fig. 5 is a side elevation showing the dirt-receptacle in position for dumping its contents. Fig. 6 is a perspective view of the dirt-receptacle detached.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the drawings, A A are the supporting and propelling wheels, and B is the axle therefor.

Mounted upon the axle B and supported thereby is the main frame, consisting of two long bars C C, one at each side of the machine,

the rear ends of which are connected by a bar D, forming a handle. Each of the said side bars has depending therefrom a frame E E, which is provided with suitable mounting for the broom F. One of the frames E has mounted thereon an idler sprocket-wheel G, said idler-sprocket being mounted adjacent to the broom-mounting.

H is a sprocket-wheel mounted on the brush-spindle.

Pivotaly attached to the side bars C C is a frame I, carrying a dirt-receptacle K. This frame I consists of two parallel bars or bands 1 1, which are rigidly attached to the upper surface of the dirt-receptacle. 2 2 are two parallel bars or bands integral with the bars or bands 1 1 and arranged at right angles thereto. These bars or bands 2 2 are connected together by an arched or bowed portion 3, forming a handle. At the junction of the parts 1 1 and 2 2 of this frame I a pivotal connection 4 is made with the said side bars C C of the main frame.

The free end of the main frame is provided with a resilient or yielding support consisting of a spring N, having upturned angular ends provided with openings adapted to receive clamping-screws S, passed through slots S', formed in the upright bars of the main frame. The central portion of the spring N is provided with a suitable fork, in which is mounted a wheel or caster L. The lower end of a rack-bar M is rigidly connected to said spring, the free end thereof resting against handle D, but not secured thereto. The upper portion of the rod or bar M is provided with teeth, and pivotally attached to the handle is a lever O, provided with a toothed segment engaging with the toothed portion of the rod or bar M.

P is a sprocket-wheel mounted upon the axle B, and R is a chain passing around said sprocket-wheel P and the said idler sprocket-wheel G and then engaging with the sprocket-wheel H on the brush-spindle. The object of this arrangement of gearing is to rotate the broom in a direction opposite to the rotation of the axle.

Each of the wheels A A is provided with clutch-sections S S, and the axle B is pro-

vided with similar clutch-sections T T. The clutch-sections T T are splined to the axle B.

T' T' are levers pivoted to the frame of the machine, as at T² T², one end of said levers being connected with the axle clutch-sections, the other ends terminating in handle portions, said handle portions being located adjacent to the handle of the machine, so as to be within easy reach of the operator.

To each of the side bars C is pivoted a bell-crank lever U, connected by rods or pitmen to the forward lower edge of the dirt-receptacle, whereby the latter may be elevated into inoperative position.

The operation of the machine will be readily apparent. A forward movement of the machine through the described arrangement of gearing communicates an opposite movement to the broom and throws the sweepings into the dirt-receptacle. In practice the spring N is adjusted through the medium of screws S and slots S' to bring the desired tension or pressure upon the broom and then rigidly held in position by said screws. In sweeping different portions of a street, however, conditions constantly vary, and the pressure of the broom must vary correspondingly with these conditions in order to accomplish efficient results. In my improved sweeper the necessary adjustments are made with ease and facility by lever O and rod M. It will be seen that a downward pressure on the handle of the lever will cause an upward movement of the rod M, compressing the spring N, and the wheel L will be removed from the ground. The weight of the machine will then force the brush against the surface of the ground until the wheel L is again down in contact with the surface of the ground. An opposite movement of the lever will cause the wheel L to be forced against the ground, thereby extending or bending the spring N and raising the brush from the surface of the ground. The first-mentioned adjustment is used when the machine is used for "scouring," the last-mentioned adjustment being used when it is desired to raise the brush over obstacles that may be in its path. It will of course be understood that these adjustments are only temporary to suit the emergency of varying conditions and the parts are automatically returned to normal as soon as lever O is released. It is also apparent that intermediate adjustments may be made for various degrees of sweepings.

When it is desired to empty the dirt-receptacle, the handle 3 of the pivoted frame is pulled downward, causing the frame to turn on its pivot and raise the dirt-receptacle until it is in position for dumping.

When it is desired to transport the machine without having it affect the street, the bell-crank lever is pulled down, and through its connection with the dirt-receptacle the said dirt-receptacle will be brought forward until

it is in close contact with the broom. Then by depressing the wheel L the entire apparatus will be raised from the ground and the machine will have no effect on the street as it is propelled over it.

As is more clearly shown in Figs. 2 and 3, the connection between the wheels and the axle is made by clutch-sections—that is, the wheels are each provided with a clutch-section and the axle is provided with similar clutch-sections. The clutch-sections upon the axle are splined thereon and are provided each with a lever for throwing them into and out of mesh with the clutch-sections of the wheels. Normally both of the clutches are in engagement; but as the clutches are provided with independent levers it will be obvious that they may be independently moved. Such a construction is provided for the purpose of keeping up the rotation of the axle when one wheel only is turning—as, for instance, when the machine is turning a corner.

Having described my invention, I claim—

1. A device of the character described comprising carrying-wheels, a main frame pivotally mounted at one end between said wheels and provided with a handle, a support for the free end of said frame, a brush mounted in said frame, means for rotating the same, a receptacle, a lever pivoted to said handle, and means operated by said lever for temporarily raising said support in relation to the frame, whereby said frame may be depressed.

2. A device of the character described comprising carrying-wheels, a main frame pivotally mounted at one end between said wheels and provided with a handle, a resilient support adjustably secured to the free end of said frame, a brush mounted in said frame, means for rotating the same, a receptacle, a lever pivoted to said handle, and means operated by said lever for temporarily raising said support in relation to the frame, whereby said frame may be depressed.

3. A device of the character described comprising carrying-wheels, a supporting-frame pivotally supported at one end between said wheels, a brush mounted in the free end of said frame, means for rotating said brush, a bowed spring connected with the free end of said frame, a carrying-wheel upon which said spring is supported, and means for raising said wheel against the tension of said spring.

4. A device of the character described comprising carrying-wheels, a supporting-frame pivotally supported at one end between said wheels, a brush mounted in the free end of said frame, means for rotating said brush, a bowed spring adjustably connected with the free end of said frame, a carrying-wheel upon which said spring is supported, a toothed rod connected with said spring, and a lever having a toothed segment engaging said toothed rod.

5. A device of the character described comprising carrying-wheels, a supporting-frame

pivotally supported at one end between said wheels, a receptacle pivotally mounted in said frame, a brush mounted in the free end of said supporting-frame, means for rotating said brush, a bowed spring connected with the free end of said frame, a carrying-wheel therefor, a toothed rod connected with said spring, and a lever having a toothed segment engaging said toothed rod.

10 6. A device of the character described comprising carrying-wheels, a slotted main frame pivotally supported at one end between said wheels, a resilient supporting member for the free end of said frame, said supporting mem-
15 ber having the ends adjustably mounted in the slots of said main frame, and means for temporarily raising said resilient support, whereby said frame may be depressed.

7. A device of the character described, comprising carrying-wheels, a supporting-frame 20 pivotally supported by said wheels, a brush mounted in the free end of said frame, means for rotating said brush, a handle for said frame, a resilient support for the free end of said frame, and means for temporarily raising said 25 resilient support in relation to the frame, whereby said frame may be depressed, said means including a lever pivoted to said handle.

In testimony whereof I have signed my name to this specification in the presence of two sub- 30 scribing witnesses.

JAMES H. BARAGAR.

Witnesses:

JAKE ACKERMAN,
EDA E. ROSENCRANS.