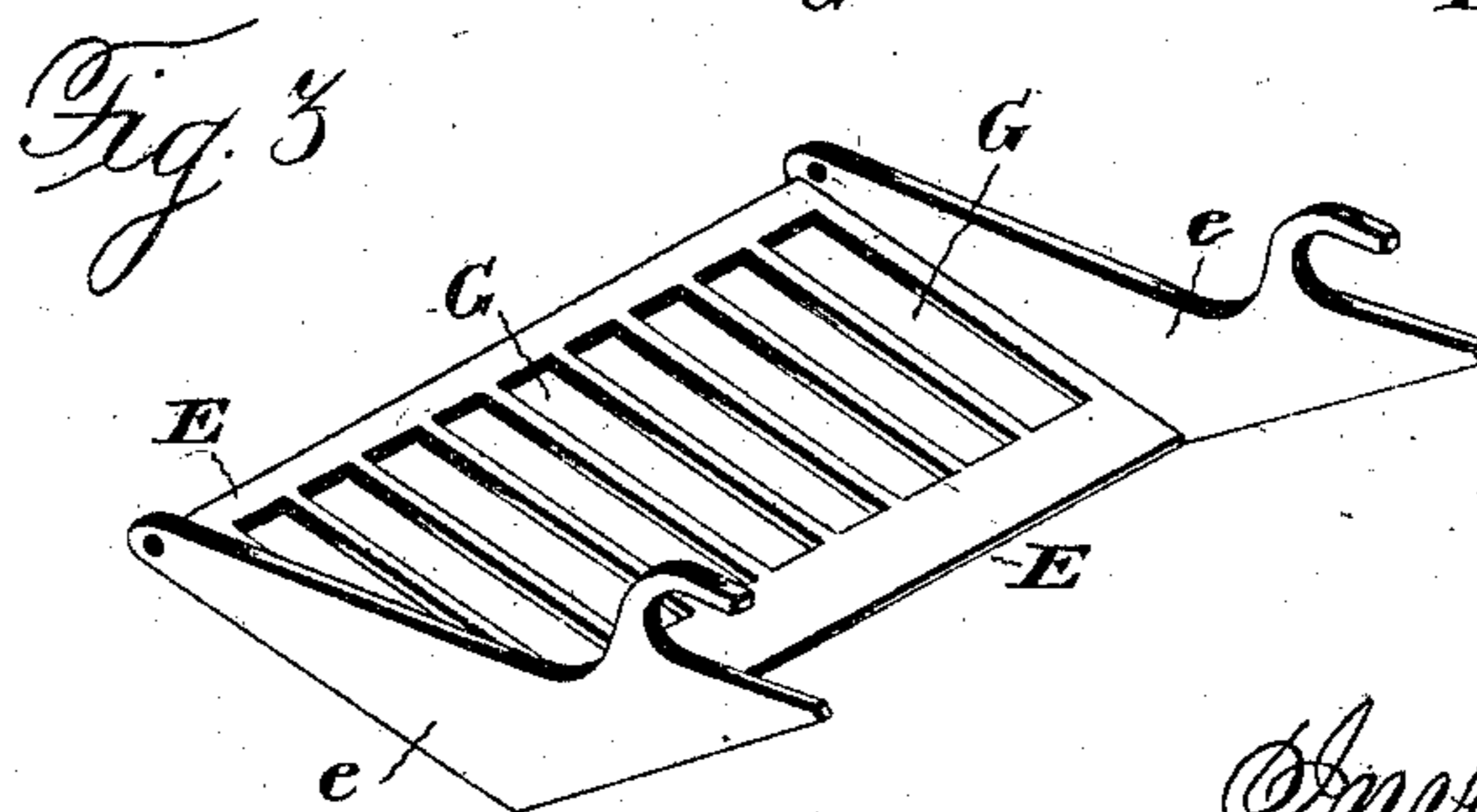
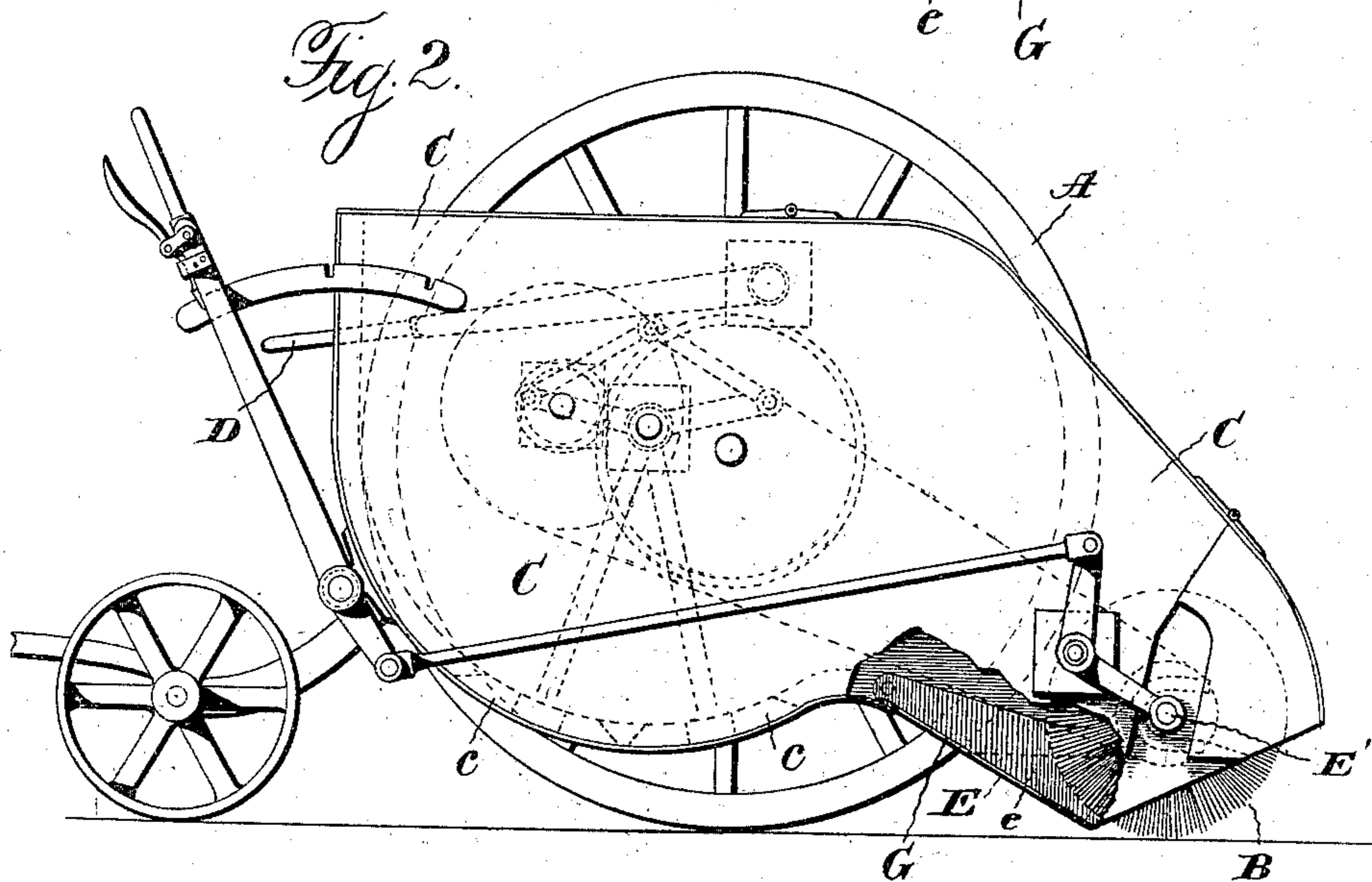
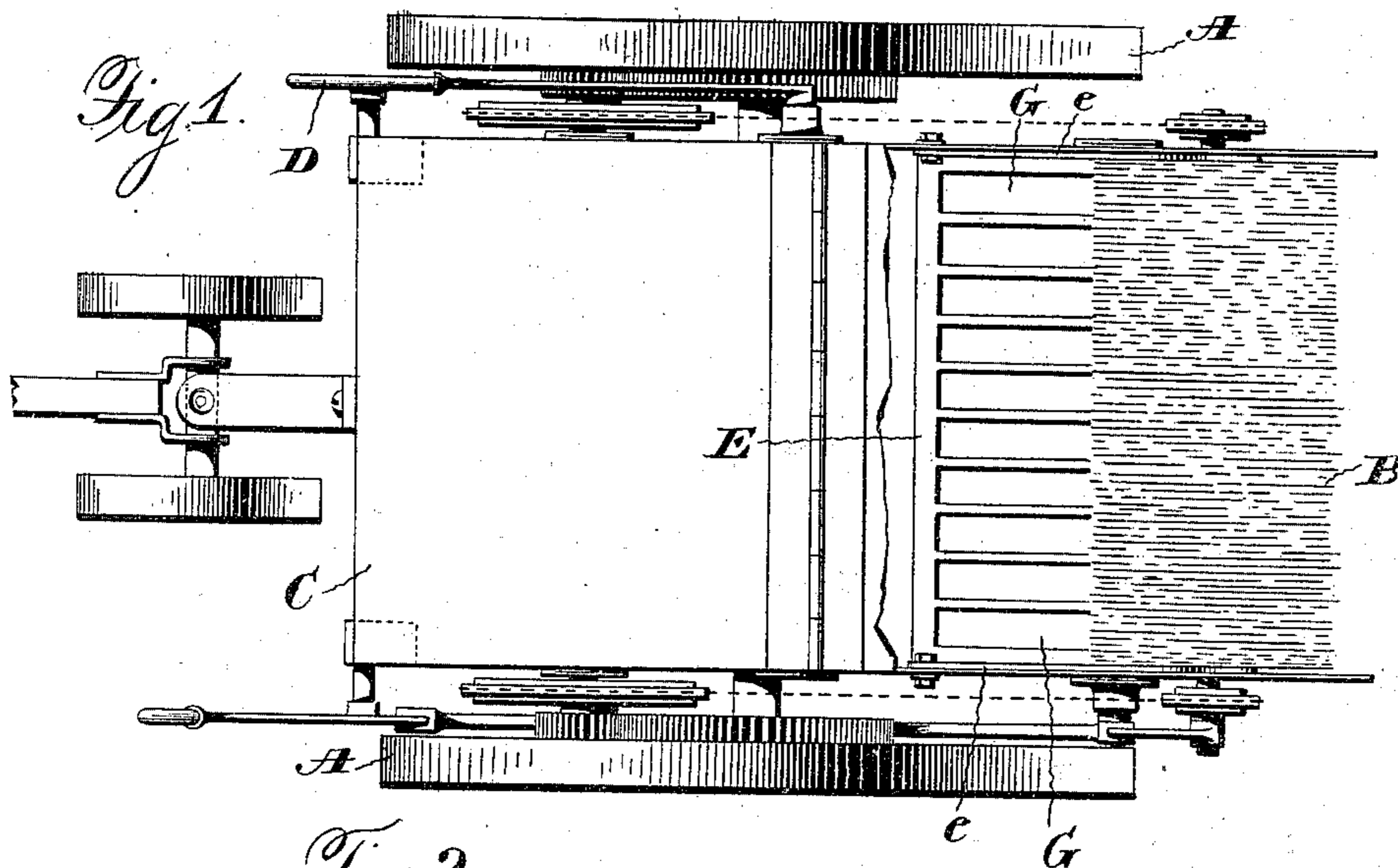


(No Model.)

T. FERRY.  
STREET SWEEPER.

No. 555,944.

Patented Mar. 10, 1896.



Witnesses  
Jas. Hutchinson  
Henry C. Hazard

Inventor  
Thomas Ferry, by  
Prindle & Russell, his Attys

# UNITED STATES PATENT OFFICE.

THOMAS FERRY, OF WILMINGTON, DELAWARE.

## STREET-SWEEPER.

SPECIFICATION forming part of Letters Patent No. 555,944, dated March 10, 1896.

Application filed October 8, 1894. Serial No. 525,282. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS FERRY, of Wilmington, in the county of Newcastle, and in the State of Delaware, have invented certain new and useful Improvements in Street-Sweepers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of my device with parts of the casing broken away; Fig. 2, a view partly in elevation and partly in section; Fig. 3, a perspective view of the apron alone.

Letters of like name and kind refer to like parts in each of the figures.

My invention relates to street-sweepers of the class in which the dirt is swept into a receptacle carried by the machine, and my object is to render such machines more practical and efficient by preventing the deposit and accumulations of sweepings upon the inclined apron that extends between the brush and the receptacle.

To the end indicated my invention consists in the street-sweeper having an apron constructed substantially as and for the purpose hereinafter specified.

While my invention is applicable to any form of street-sweeper in which an apron is employed in connection with a revolving brush I illustrate it in connection with a machine, such as is shown in my pending application, Serial No. 496,285, filed January 9, 1894, in which are employed two carrying-wheels A and A, that are geared to and drive a rotary brush B, located in rear thereof, and a receptacle C, that is arranged between the wheels and into which the sweepings are to be thrown by the brush. The bottom of said receptacle is preferably formed of two pivoted curved sections *c* and *c*, that may be opened, when desired, to discharge the contents thereof by means of a hand-lever D.

Pivoted at its front higher end at the rear edge of the receptacle bottom is an apron E, that inclines downward and rearward and has its rear lower end just in advance of the point where the brush B touches the ground, but without touching the latter itself. I preferably support the apron wholly above the ground to avoid the wear which would be

caused by its trailing over rough ground or pavements. The apron is supported in this position and at the same time kept in proper relation to and moved with the brush B as the latter is raised and lowered by connecting its side pieces *e* and *e* with the brush-shaft E', which side pieces are provided with rearwardly-opening slots to receive said shaft, a construction that permits the brush to be easily placed in and removed from position, when necessary.

By practical tests I have found that a serious difficulty in the use of dirt-collecting sweepers is that material too heavy to be readily thrown by the brush into the receptacle falls upon the apron, and, if moist, as is usually the case, adheres thereto and results soon in such an accumulation as to not only entirely bar the passage of other material to the receptacle, but also cause the brush to discharge its sweepings to the rear. As a consequence the machine has to be repeatedly stopped for the purpose of cleaning the apron, and this is such an inconvenience that the sweeper whose construction requires it may be considered as impracticable. With a view to remedy this serious difficulty I have tried various constructions, and the most satisfactory results were secured by employing an apron, such as that shown, having a number of parallel slots G and G, extending in the line of travel of the machine from near the upper end of the apron to within several inches of the lower end thereof and of such width as to permit the free passage of material failing to reach the receptacle. The narrow unslotted portion of the lower edge of the apron need have only such width as is sufficient to give direction to the sweepings, so as to insure the passage into the receptacle of material to which enough force has been applied by the brush. Such sweepings as fall through the slots G and G are again acted upon by the brush, and if they do not eventually reach the receptacle will at any rate be constantly carried onward by the brush.

My construction of apron is to be distinguished from the kind which consists of a series of fingers formed by slitting or cutting the apron down to its lower edge, since I do not have mere slits, but wide slots that afford

a free passage, which latter is something not possible where simply slits are provided.

Having thus described my invention, what I claim is—

- 5 In a street-sweeping machine, the combination of a brush a receptacle, and an inclined apron between the two, that is slotted or open for the free passage of material, the lower edge of said apron co-operating with the brush to

guide material swept by the latter, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of October, 1894.

THOMAS FERRY.

Witnesses:

HENRY C. HAZARD,  
JAS. E. HUTCHINSON.