(No Model.) 2 Sheets—Sheet 1.

T. BRADLEY.

Street Sweeping Machine.

No. 243,358. Patented June 28, 1881.

Fig. 1.

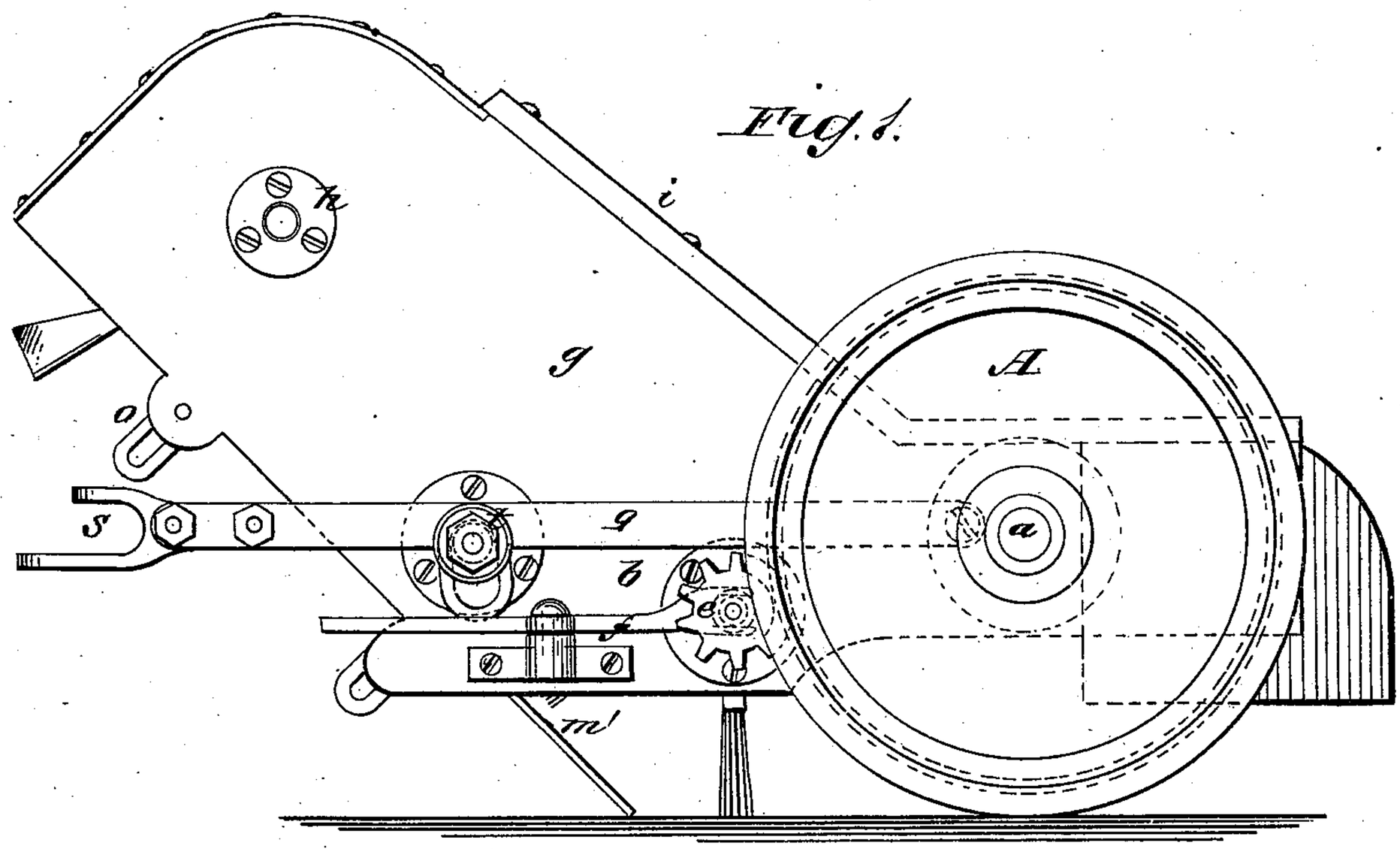

Fig. 2.

WITNESSES:

Francis McArdle

C. Sedgwick

INVENTOR:

T. Bradley

BY Munn & Co

ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

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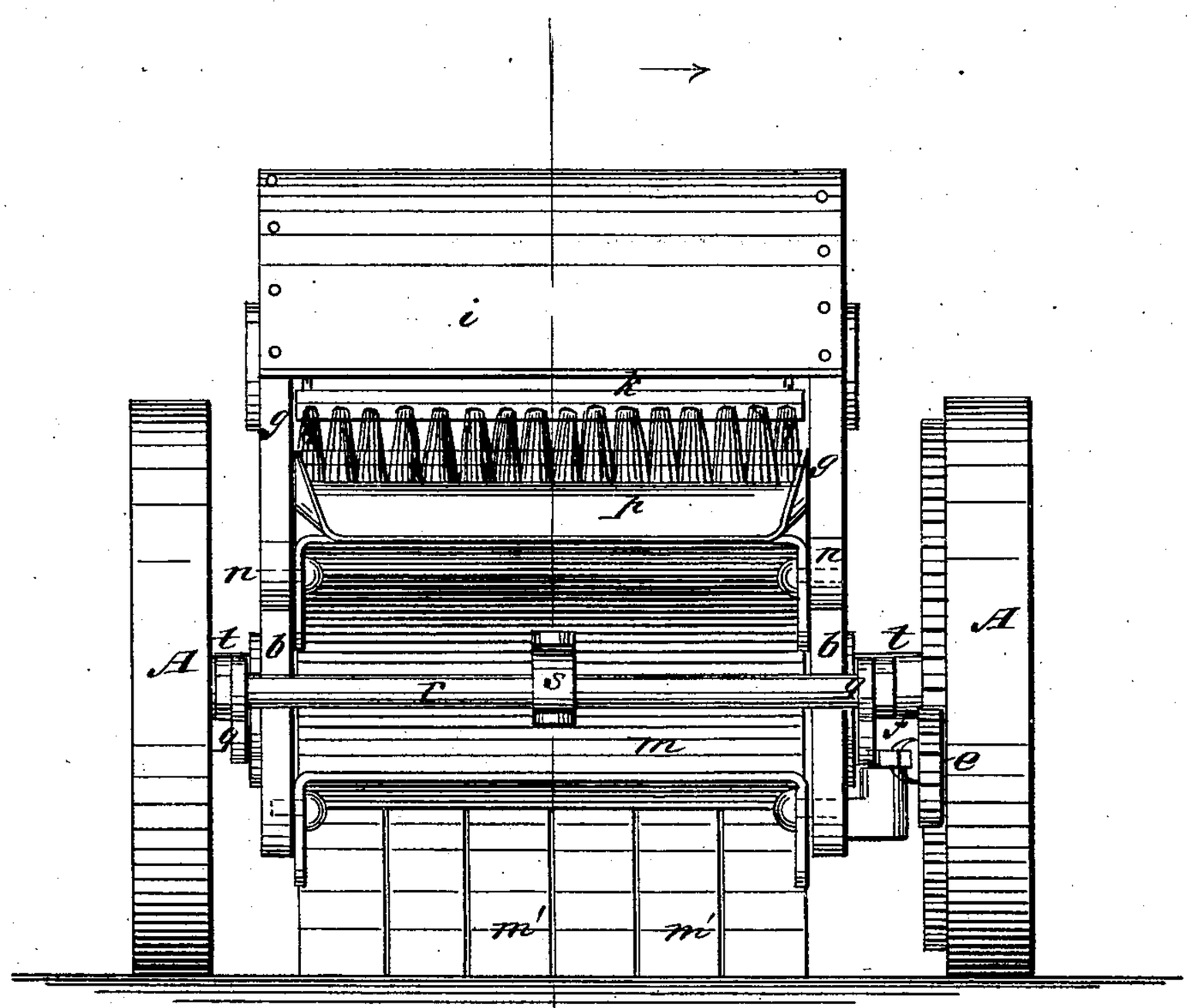
Fig. 3



WITNESSES:

Francis McArdle.

C. Sedgwick

INVENTOR:

T. Bradley

BY Munn & Co

ATTORNEYS.

connected to and detached from a cart. Separate horses and men are not required, but the cart-horses are utilized to draw the machine.

The principal weight of the machine being forward of the axle, I attach a counterbalance-weight, *u*, at the back of the axle, so that when the machine is not in use the brushes will be raised, or the machine balanced on the axle, instead of resting on the brushes.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a street-sweeping machine, the combination, with the chute, of the apron *m* and clevis *s*, the latter made with two prongs adjustable to regulate the height of delivery, as described.

2. The adjustable tongues *q*, provided with forked clevis *s*, combined in a street-sweeping machine with the supporting axle *a*, inclined delivery-trough, and endless belt of brushes, substantially as and for the purposes set forth.

THOMAS BRADLEY.

Witnesses:
GEO. D. WALKER,
C. SEDGWICK.

UNITED STATES PATENT OFFICE.

THOMAS BRADLEY, OF NEW YORK, N. Y.

STREET-SWEEPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 243,358, dated June 28, 1881.

Application filed October 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, THOMAS BRADLEY, of the city, county, and State of New York, have invented a new and useful Improvement in Street-Sweeping Machines, of which the following is a specification.

My improvements relate to machines for sweeping streets, gathering the sweepings, and delivering the material gathered to carts at one operation.

The object of my invention is to save the use of horses and men, specially for the sweeping-machine, by furnishing a machine adapted for attachment behind the carts used to convey away the sweepings, so that the sweeper can be attached, drawn along, and when the cart is filled the machine disconnected and left for the next cart.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of the machine. Fig. 2 is a vertical longitudinal section, and Fig. 3 is a front elevation, of the machine.

Similar letters of reference indicate corresponding parts.

A A are the supporting-wheels of the machine, fixed on axle *a*.

b b are side bars supported on the axle, which side bars extend forward and sustain a cross-shaft, *c*, on which are fixed pulleys or a roller, *d*, that carries and moves the brushes. On one end of shaft *c* is a pinion, *e*, meshing with a gear formed on one wheel, A. The pinion *e* is held to the shaft by a groove and feather so that it may slide, and a groove in the hub of the pinion is engaged by the forked end of a shifting-lever, *f*, that is hung at the side of the machine, by which lever the pinion can be thrown in and out of gear.

From the side bars, *b*, boards *g g* extend forward at each side of the machine and incline upward. Across the upper and forward ends of boards *g* is fitted a shaft or roller, *h*, for supporting the endless belt of brushes. The bars *b* and boards *g* are covered, as shown at *i*, so that the brushes are inclosed. In constructing the machine I prefer to use a frame of iron bars, and use sheet metal for the inclosing-boards.

The endless belt of brushes consists of strips *k* fitted with brush material, forming brush-heads, that are attached upon endless chains *l l*. These chains run upon spiked pulleys or rollers fixed on the shafts *c h* so that the chains and brush-heads are prevented from shifting. A wide endless belt may be used in place of the chains, if desired.

Beneath the brushes is a plate or apron, *m*, of sheet metal, which extends entirely across the machine, and is sustained on the side-boards *g* by set-screws *n*, passing through slotted flanges of cross-bars *o o*, to which the plate *m* is attached. The plate or apron *m* thus forms the bottom of an inclined trough in which the brushes move, and the plate is adjustable on boards *g*, so that it can be set up to the brushes as they wear. The upper end of plate *m* is bent outward to form a delivery-chute, *p*, and the lower end is slit lengthwise, as shown in Fig. 3, to form tongues *m'*, the ends of which, in use, rest on the ground immediately in front of the brushes that are gathering the dirt. The plate *m* is preferably made of steel.

At the sides of the machine are draft-bars or tongues *q q*, pivoted at or near the axle, and extending forward in a nearly horizontal direction, so that cross-bars *r r*, that connect their forward ends, are beneath the apron *m* and behind chute *p*.

To the bars *r* is connected a clevis, *s*, having apertures in the outer ends of its forks.

In using the machine the clevis *s* is to be connected to a hook secured on the cart at a suitable place, so that the chute *p* shall extend over the body of the cart. The forked clevis is used, so that by using either fork, as required, the chute will be elevated more or less, and the brushes brought to or from the ground. I also provide for adjustment of the brushes by connecting the tongues *q* to the sides of the machine with clamping-screws *t*, that pass through slots in the tongues, which construction allows the tongues to be raised and lowered to vary the height of clevis *s*.

In operation, the machine being attached to a cart and drawn forward, the brushes gather the dirt and carry it up the apron *m* to chute *p*, from whence it falls into the cart. The spring-tongues *m'* give way to obstructions, such as stones, and, being separate, any one can pass a stone without raising the others. It will be seen that the machine can be readily