

(No Model.)

P. PETRIE.

BROOM HEAD FOR TRACK SWEEPERS.

No. 365,628.

Patented June 28, 1887.

Fig: 1

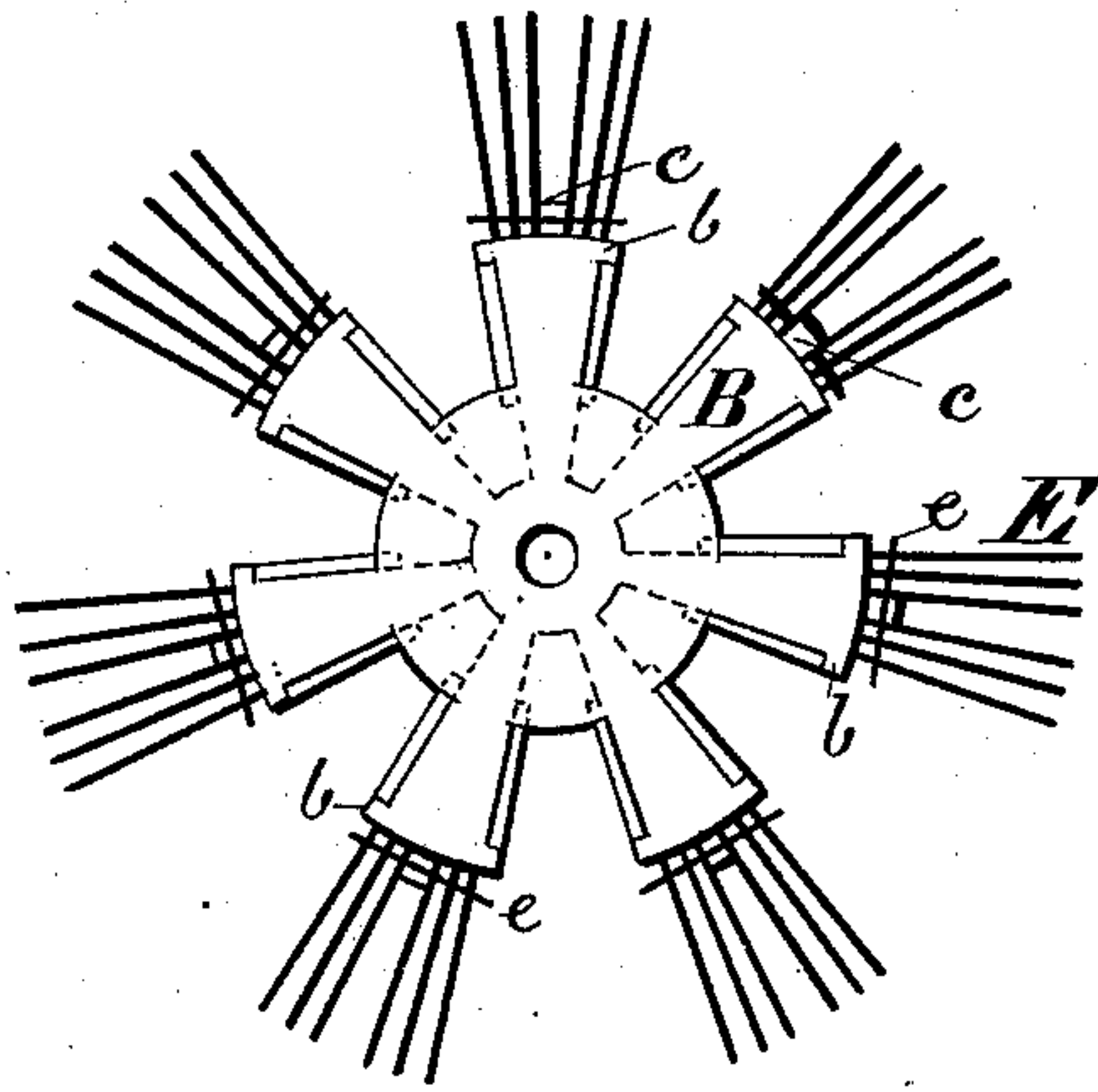


Fig: 2

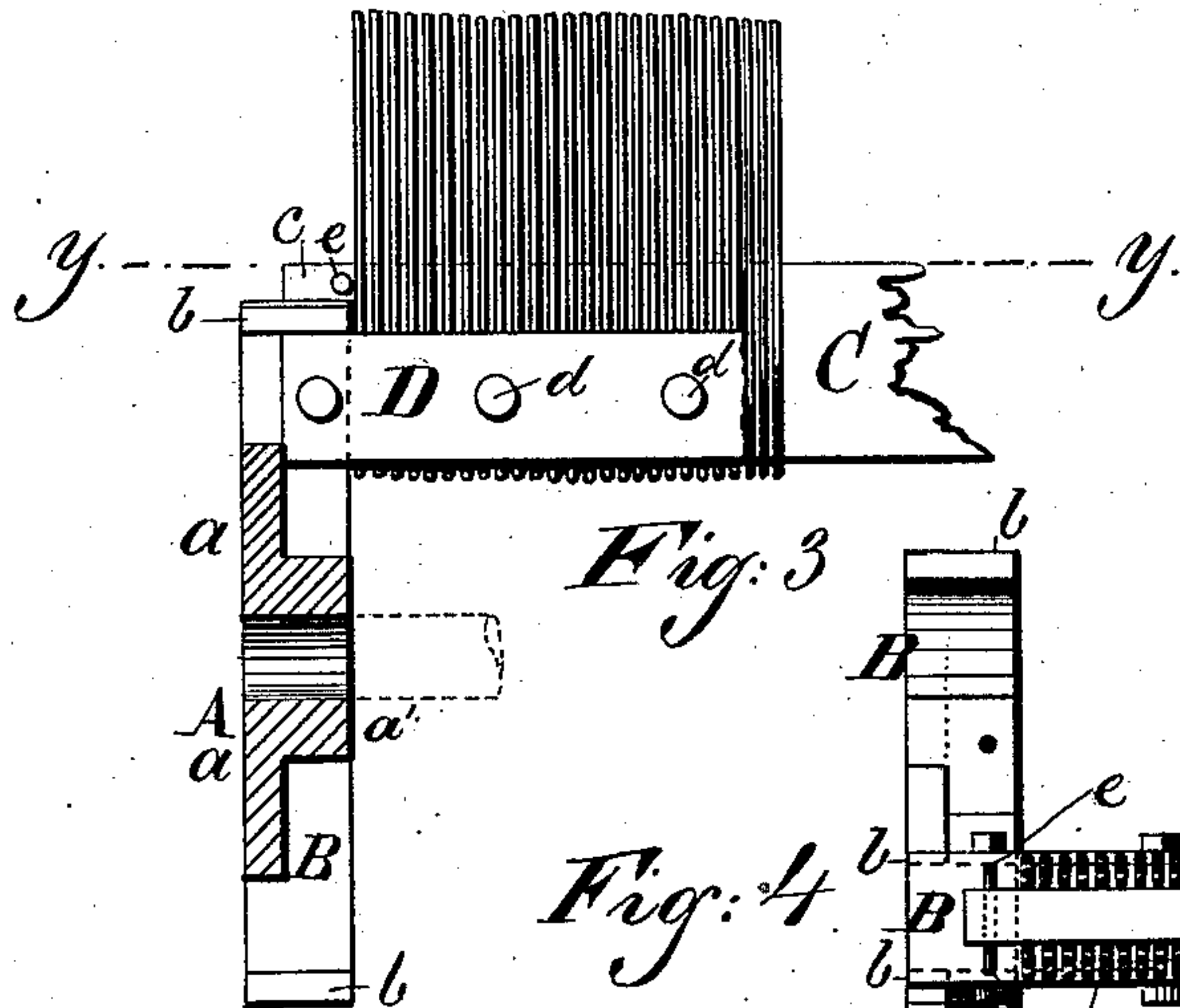
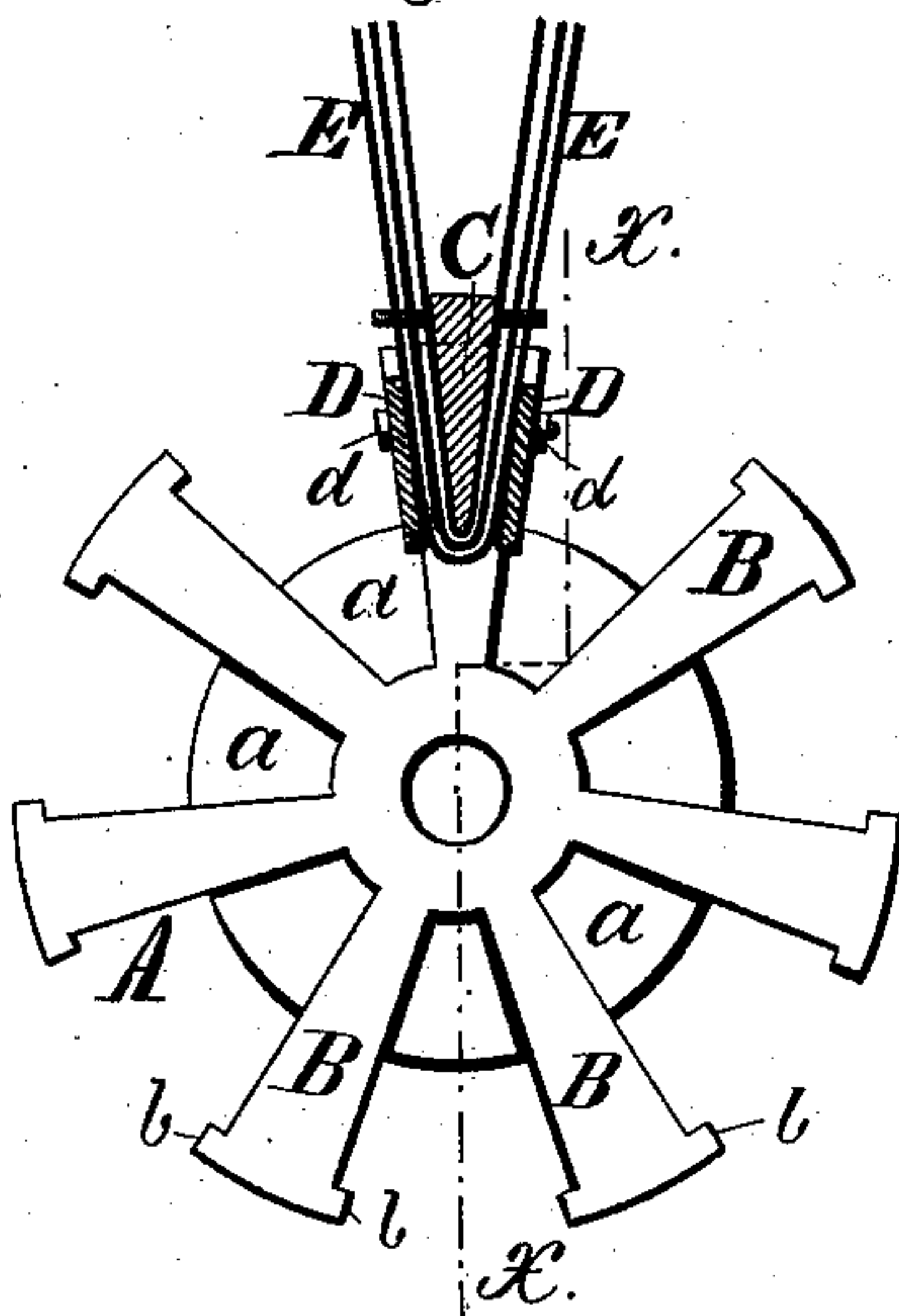


Fig: 3

Fig: 4

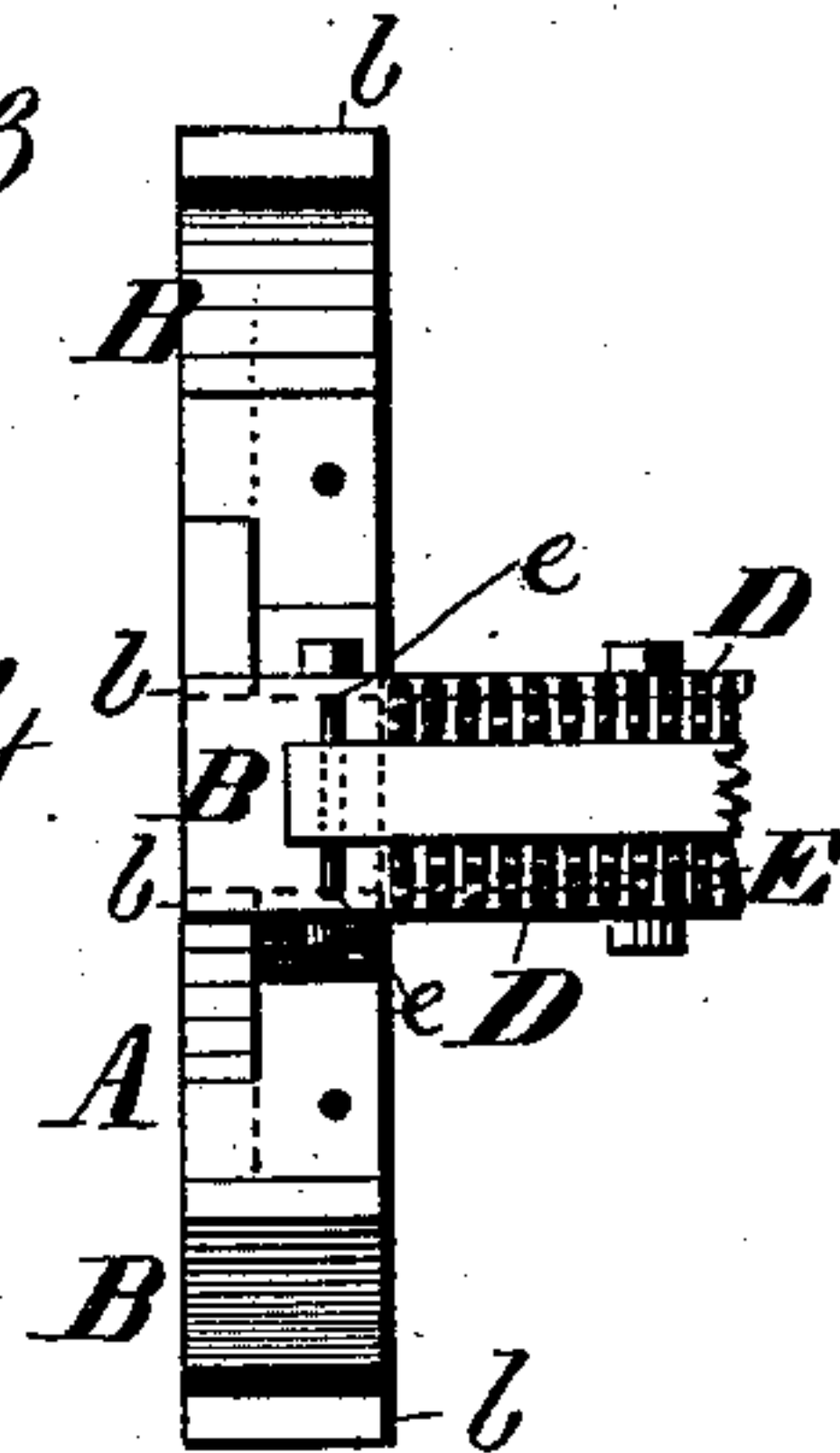
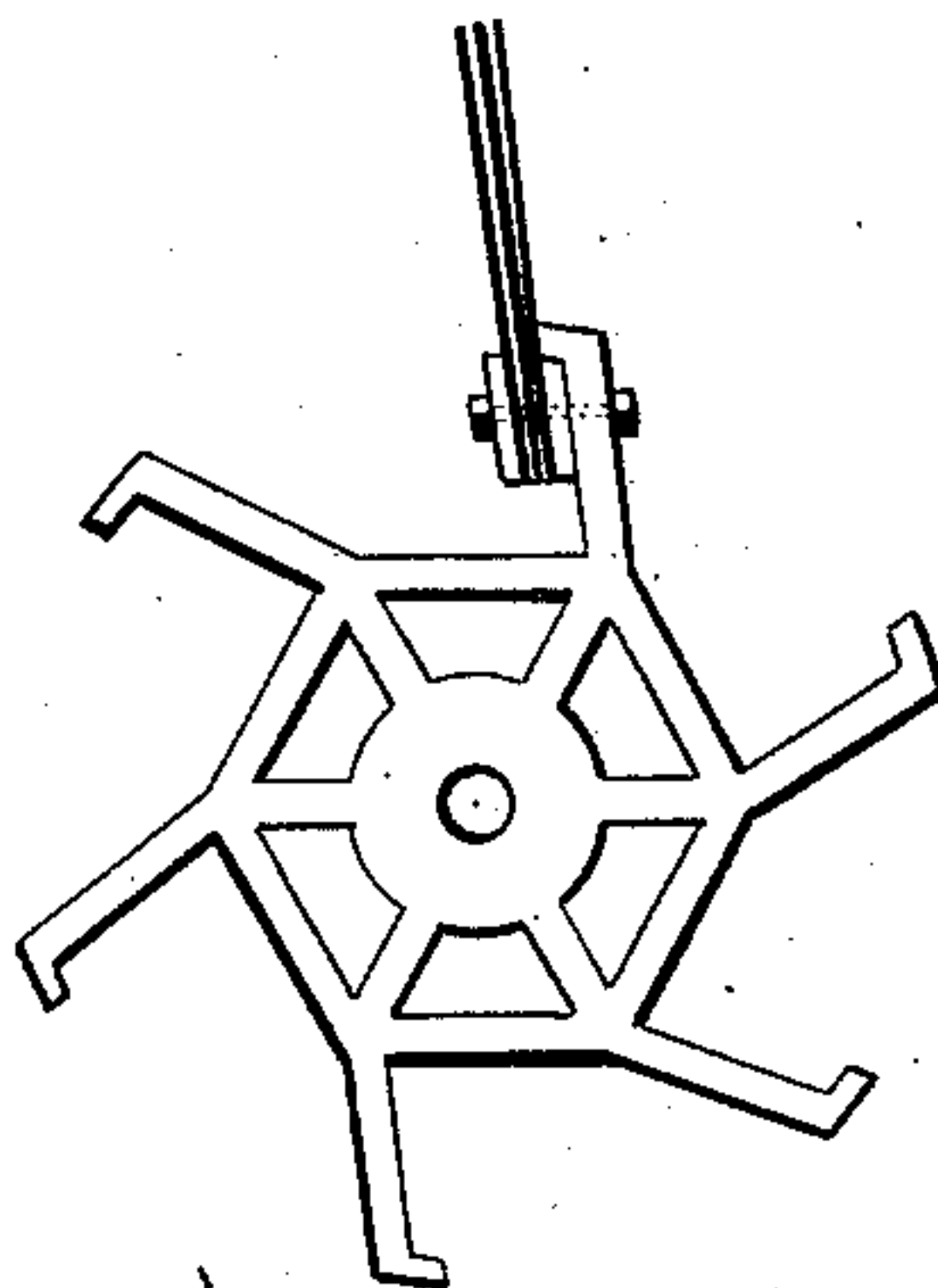


Fig: 5



WITNESSES
Elmer Vesten.
F. H. Gouman

INVENTOR
Peter Petrie
BY *A. W. Almquist*
ATTORNEY

UNITED STATES PATENT OFFICE.

PETER PETRIE, OF BROOKLYN, NEW YORK.

BROOM-HEAD FOR TRACK-SWEEPERS.

SPECIFICATION forming part of Letters Patent No. 365,628, dated June 28, 1887.

Application filed October 16, 1886. Serial No. 216,376. (No model.)

To all whom it may concern:

Be it known that I, PETER PETRIE, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Broom-Heads for Track-Sweepers, of which the following is a specification.

My invention relates to sweeping-machines for street and railway tracks, and has for its object to provide an improved construction of the broom-head used for the revolving brooms or sweepers proper of similar machines, whereby their effectiveness is increased, the expense lessened, and the inserting, removing, and replacing of the rattan bristles are facilitated.

The improvement will be hereinafter fully described, and specifically pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 represents an end view of the revolving broom of a track-sweeper constructed according to my improvement. Fig. 2 is a face view of the inner side of the broom-head, showing, also, the manner of attaching the rattan, and in cross-section the fastening-bars. Fig. 3 is a section on the line *x x* of Fig. 2. Fig. 4 is a detail section on the line *y y* of Fig. 3. Fig. 5 is an end view of one form of broom-head and attachment as heretofore used.

A is the broom-head, one of which is secured upon a revolving axle at either end thereof, a row of rattan bristles being clamped between bars attached at their ends to the opposite broom-heads. The broom-head is a single casting consisting of a disk, *a*, having central hub, *a'*, and perforated through the said hub to receive the axle. Radially-set outward-widening arms B, seven in number, and cast in one piece with the said disk and hub, project a distance outside of the disk, and on the outer end of the said arms are cast laterally-opposite shoulders *b*. The cane to form the bristles is doubled up around a wooden bar, C, wedge-shaped in cross-section, as shown in Fig. 2, so that the outer ends of the cane will diverge according to the angle of the wedge. Rows of cane thus formed are clamped in position by flat iron bars D at opposite sides of the wedge-shaped wooden bar C and bolts *d*, passing through the said bars

D C and fastened by suitable nuts, as shown in the drawings.

To prevent the cane from slipping out end-wise from between the bars before attaching them to the broom-heads, a piece, *e*, at the outer edge of the wooden bar is left projecting at each end thereof, a hole bored through the same, and a pin, *e*, inserted through the said hole crosswise to the bar, thus effecting its purpose. It will be seen that by doubling up the cane E, as aforesaid, it will not only be prevented from getting loose and coming out of its fastening, but two rows of cane are thus formed, (instead of one, when the old construction shown in Fig. 5 is used,) and by using seven arms B a revolving brush of fourteen rows of cane bristles is obtained. The cane having been bent, as aforesaid, around the wooden bar C and clamped to the same by the iron bars D at opposite sides, and secured by bolts *d*, the said side bars, D, are then bolted at their ends to the arms B, as shown in Figs. 2 and 3, the length of the broom being found without adjustment by moving the end of the bar D until it rests in contact with the disk *a*, as shown in Fig. 3, and the radial distance of the outer edge of the bar D (and thereby, also, the uniform diameter of the broom) being obtained by simply moving the bar D outward until its outer edge rests against the inner edge of the shoulder *b*. The open space between each two adjacent arms B B, outside of the disk *a*, gives access for inserting and fastening the end bolts through the bars D and the arms B.

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

1. A revolving broom-head consisting of a disk, *a*, having hub *a'*, and arms B, projecting radially beyond the said hub and disk and provided at their outer ends with laterally-opposite shoulders *b*, in combination with the bar C, the side bars, D, and the bristles E, clamped at opposite sides of the said bar C, between the same and the bars D, the ends of the latter bars resting against the said disk *a* and shoulder *b* and being secured to opposite edges of the said arms B.

2. A revolving broom-head consisting of a disk, *a*, having hub *a'*, and outward-widening

arms B, the said arms projecting radially beyond the said hub and disk, and provided at their outer ends with laterally-opposite shoulders *b* for the attachment of the bristles holding bars D, substantially as set forth.

3. The device for forming and holding double rows of bristles for a revolving broom, which consists in the combination of the wedge-shaped bar C, the canes E, bent around the thinner edge of the said bar, the bars D, clamping the cane E against opposite sides of the bar C, and the bolts *d*, securing together

the said bars D C D and cane E, the said wedge-shaped bar C having end projections, *c*, provided with cross-pins *e*, substantially as specified.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 13th day of October, 1886.

PETER PETRIE.

Witnesses:

A. W. ALMQVIST,

A. WAHLBERG.