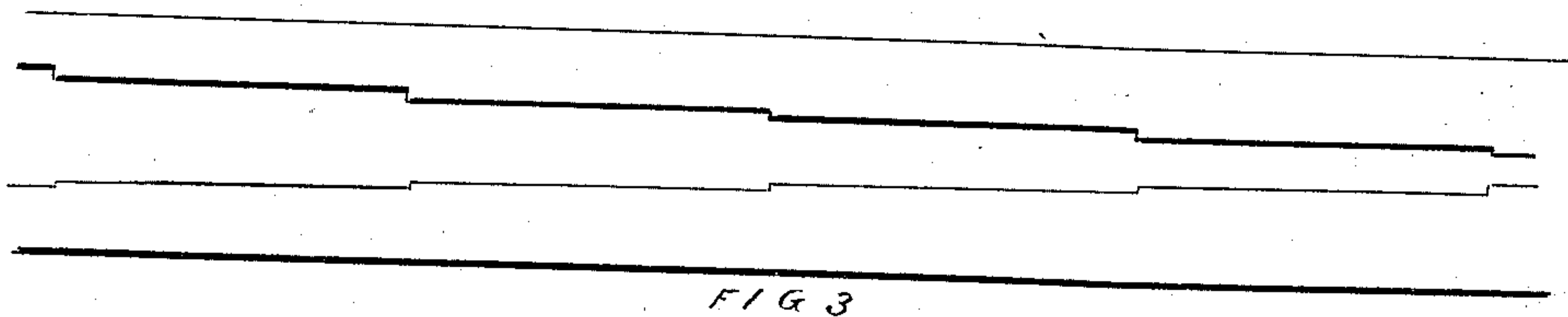
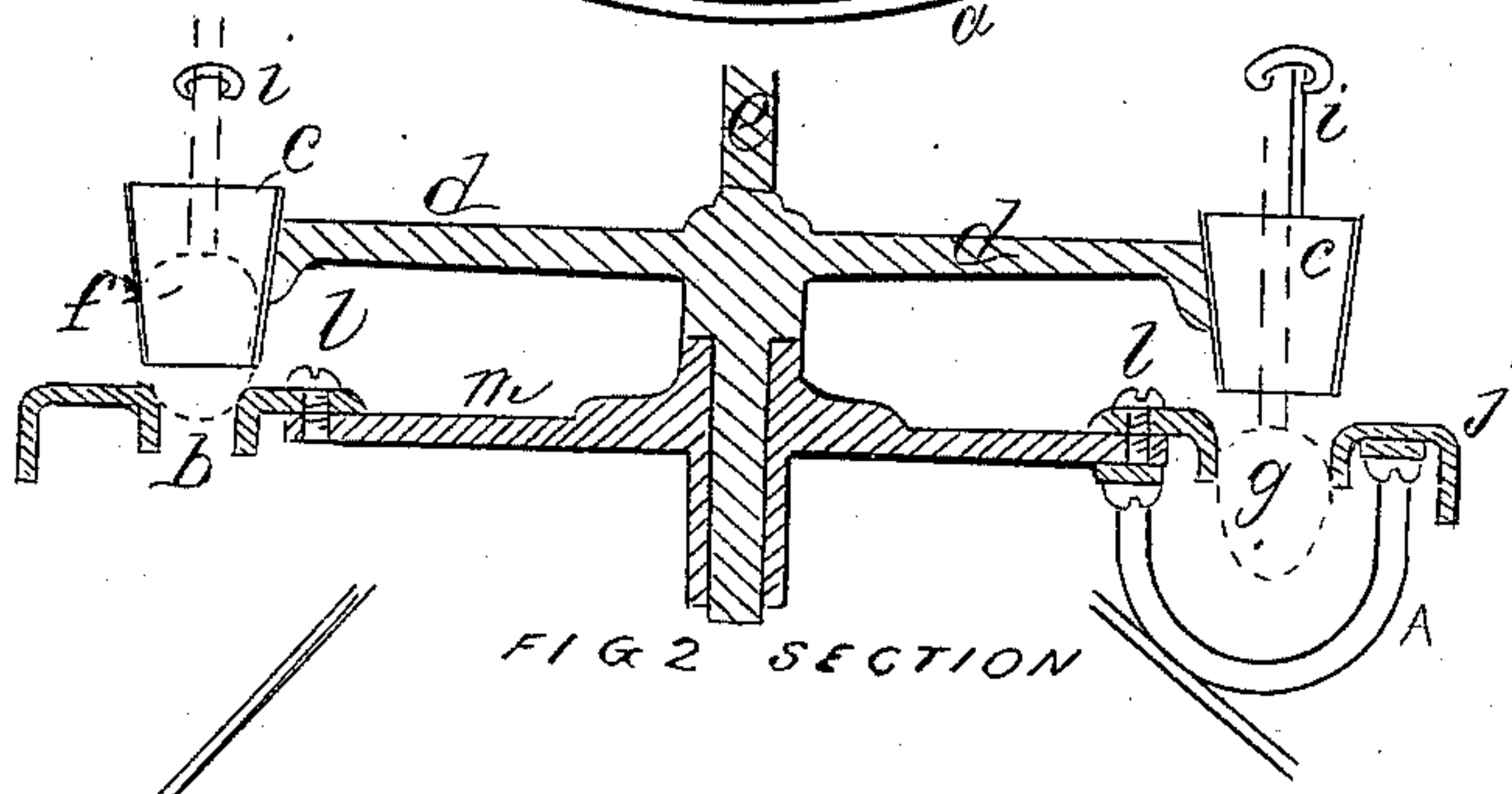
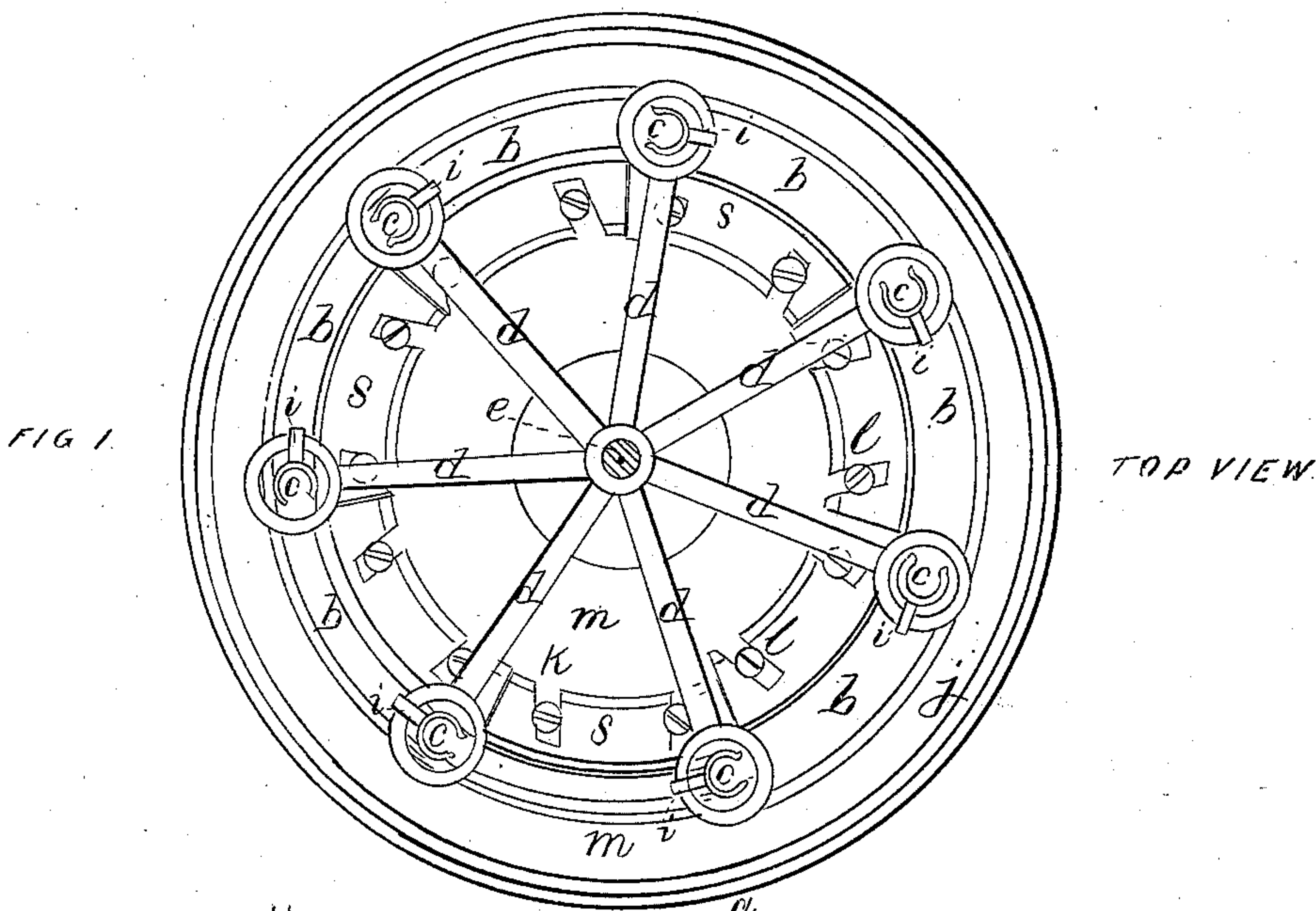


# *G. A. Burrough,* *Napping Cloth.*

*No. 99,840.*

*Patented Feb. 15. 1870.*



WITNESSES.

*William Aplin*

*Charles Aplin*

INVENTOR.

*G. A. Burrough*

# United States Patent Office.

GEORGE A. BURROUGH, OF PROVIDENCE, RHODE ISLAND.

*Letters Patent No. 99,840, dated February 15, 1870; antedated February 10, 1870.*

## IMPROVEMENT IN TEASEL-GRADING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that I, GEORGE A. BURROUGH, of Providence, in the State of Rhode Island, have invented a new and useful machine, which I call a Grading Machine for Grading Teasels, an article used by woolen manufacturers for raising the nap on cloths and other articles; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, in which like parts are represented by like letters in the several figures, and in which—

Figure 1 is top view;

Figure 2 is a sectional view; and

Figure 3, a partial top view of a straight machine, which was first made but not considered as good as fig. 1.

The machine is made of iron or other materials, in a circular form, about four feet across the top, with about forty slots or spaces graduated from three-quarters of an inch to one and a half inch wide and three inches long, with a suitable number of caps.

In the drawings, fig. 1—

*a* represents the seat for the operator.

*b*, graduated slots.

*c*, caps.

*d*, radial arms.

*e*, a rotary shaft.

*i*, supports.

*j* is a fixed exterior flange.

The width of the slots *b* is regulated by sections *s* of an annular ring concentric with the flange *j*, these sections to be adjusted inward or outward by a parallel movement through slots *k* in the same and set-screws *l*, by which they are secured to the center-table or platform.

The machine is set in motion by power being applied in any suitable manner to the shaft *e*, fig. 1, and the operator, at *a*, places the teasels in the cups with their stems in the supports *i* to keep them in a perpendicular position as they rotate over or through the graduated slots, until they reach one sufficiently wide to allow of their passing through; as shown in fig. 2, *f* representing a teasel passing over, and *g* one passing through a slot, suitable receptacles *A* being provided underneath to keep the sizes separate.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a teasel-grading machine, the graduated slots or spaces formed by the annular flange *j*, and the adjustable sections *l*, for the purpose set forth.

2. In combination with said slots, the radial rotary arms *d*, caps *c*, and supports *i*, arranged as and for the purpose set forth.

GEO. A. BURROUGH.

Witnesses:

WILLIAM APLIN,

CHARLES APLIN.