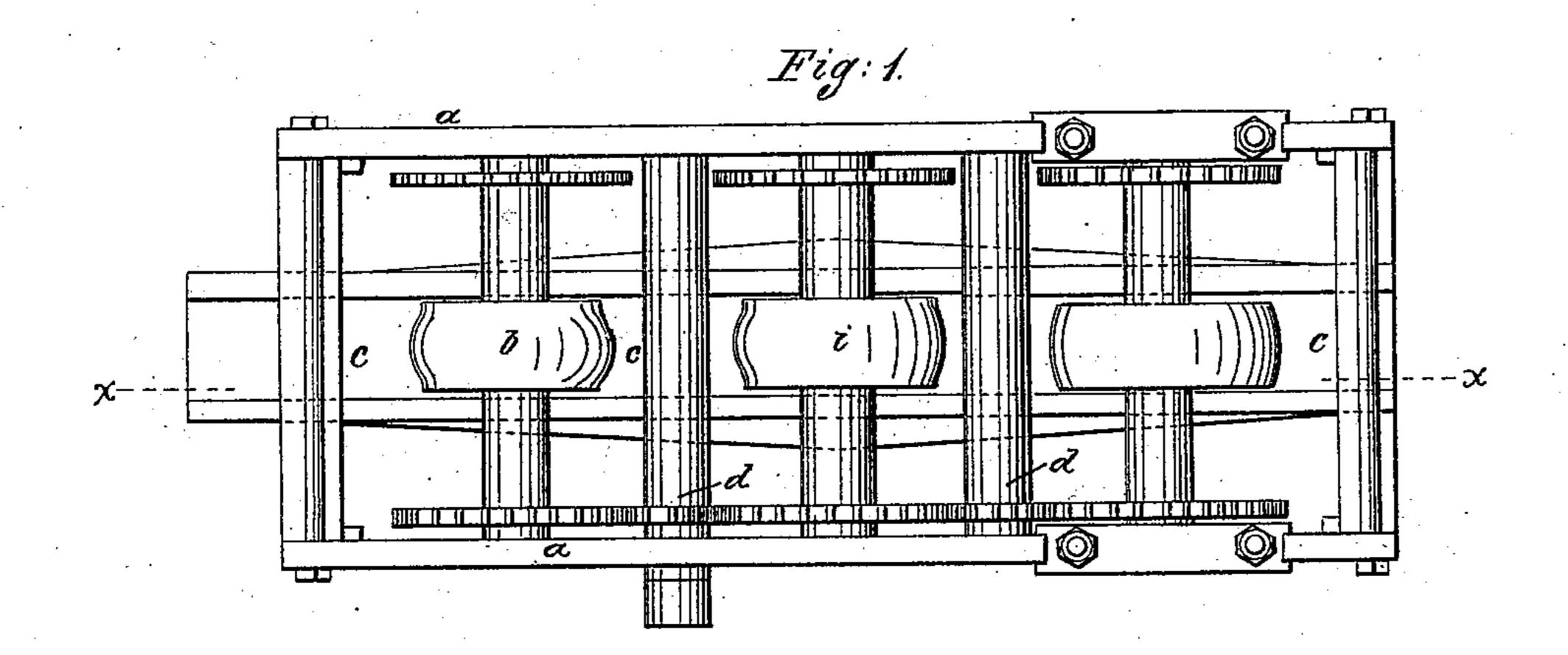
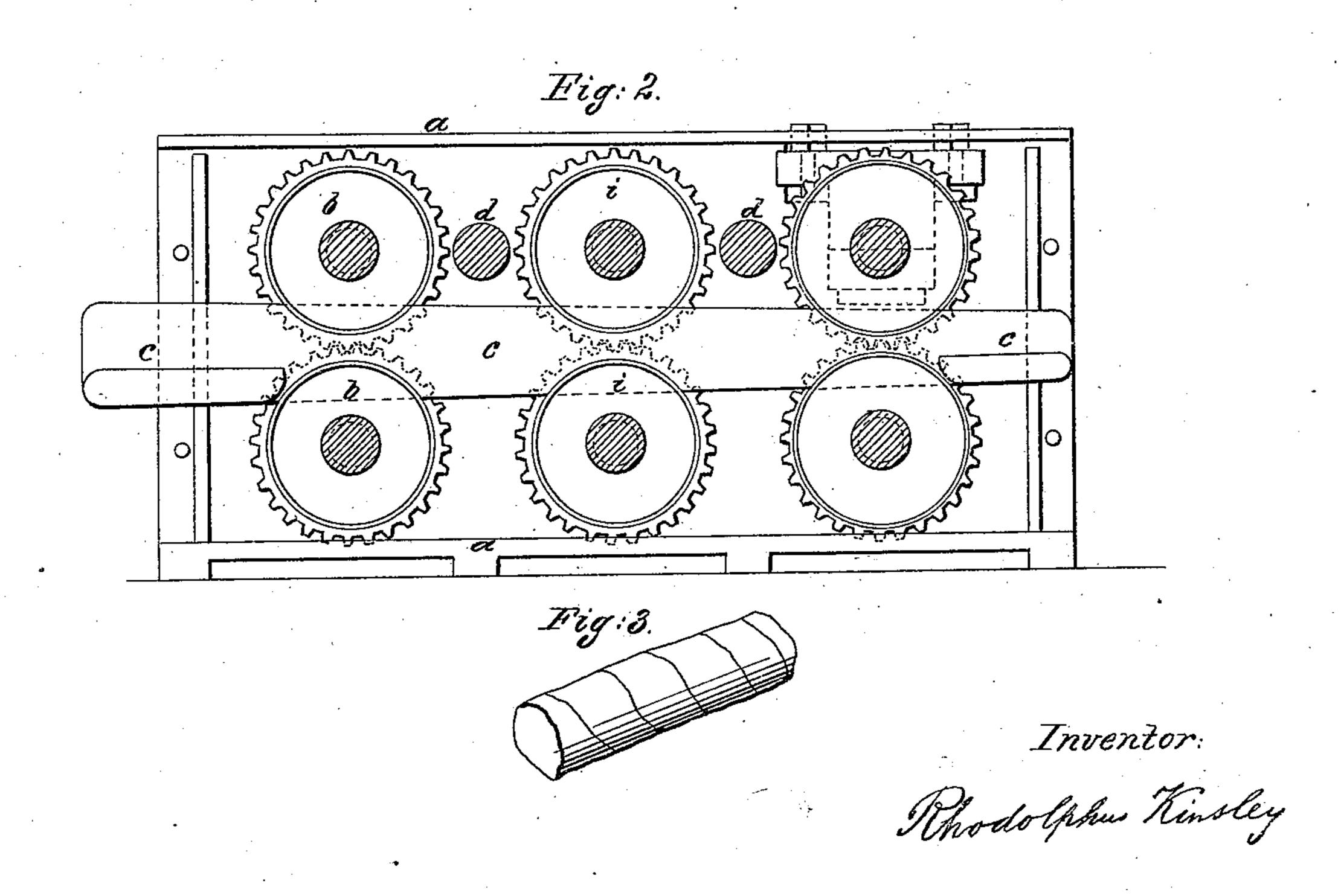
### R. KINSLEY.

## Crimping Tobacco.

No. 19,856.

Patented April 6, 1858.





# United States Patent Office.

R. KINSLEY, OF SPRINGFIELD, MASSACHUSETTS.

#### MACHINE FOR CRIMPING TOBACCO.

Specification forming part of Letters Patent No. 19,856, dated April 6, 1858.

To all whom it may concern:

Be it known that I, Rhodolphus Kinsley, of Springfield, in the county of Hampden and State of Massachusetts, have invented a new and useful Apparatus for Crimping Rolls of Tobacco Previous to Pressing in the Process of Manufacture; and I do hereby describe and ascertain said invention in the following description and accompanying drawings, in which—

Figure 1 is a top plan; Fig. 2, a vertical longitudinal section on the line  $x \, x$  of Fig. 1; Fig.

3, a roll of tobacco.

In the manufacture of chewing-tobacco into "lumps," it is first formed into rolls by hand, as seen in Fig. 3, after which, by the process heretofore employed, each roll is placed in a press upon a board. When one board is covered properly with rolls, another board is laid upon them and covered with a layer of rolls like the first, to be succeeded by another board, and so on until the press is full, when by an ordinary screw and lever the whole is flattened as much as possible by these means, after which the operation is completed by pressing each lump in a mold. It will be obvious that the method above described will not produce a thin flat lump of equal density; but there will at the center be too much material and at the edges a deficiency. Many evils arise from this cause, for if the lumps are dense at the center and loose and spongy at the edges they will, when packed in boxes, soon become moldy or unsound; besides, the appearance of the article is very inferior to what it would be if the whole lump were of equal density. To obviate this defect I first devised a convex follower, so as to press down more in the center, and thus crowd the material toward the edges. This partially improved the manufacture, but did not sufficiently equalize the roll, especially lengthwise. I have therefore made the present apparatus, which practically removes all the important defects of previous methods and prepares the lumps sufficiently for the last process.

The construction of my machine for crimping is as follows: In a suitable frame, a, I place one or more pairs of rollers, (I have found three pairs, as in the drawings, to produce, in most cases, a sufficient result,) with a guiding-trough, to conduct the rolls of tobacco thereto, and from them onward to any number of pairs of rollers the machine may contain. In the drawings, b b is the first pair of rollers. The top plan shows these rollers to be convexed on their surface and rounded off toward their edges. c is the trough through which the roll passes between said rollers b b, by which the roll is flattened and the material somewhat equalized and crowded outward toward the edges. Thence the roll may be made to pass through another similar set, i, and so on, care being taken to decrease the distance a little of each pair, and not to have so great a number as to break or injure the surface wrapper. The last pair of rollers should be flat-surfaced cylinders, or only very slightly convex. The rollers are all geared together, with intermediate gear, d, between the pairs, to cause them all to revolve in the proper direction, obviously necessary to produce the result.

With this machine one hand can crimp a much larger amount than several by the old system, and the work is much more perfectly done. The last pair of rollers can be set ac-

cording to the material worked.

Having thus fully described my crimpingmachine, what I claim, and desire to secure by
Letters Patent, is—

The employment of one or more pairs of rollers, constructed and arranged substantially as above set forth, for equalizing and crimping rolls in the manufacture of lump-tobacco.

In testimony whereof I have hereunto set my

### RHODOLPHUS KINSLEY.

In presence of— HIRAM C. FENTON, OLIVER FENTON.