

(No Model.)

J. H. WHITING.
TUMBLING BARREL.

No. 502,797.

Patented Aug. 8, 1893.

Fig. 1

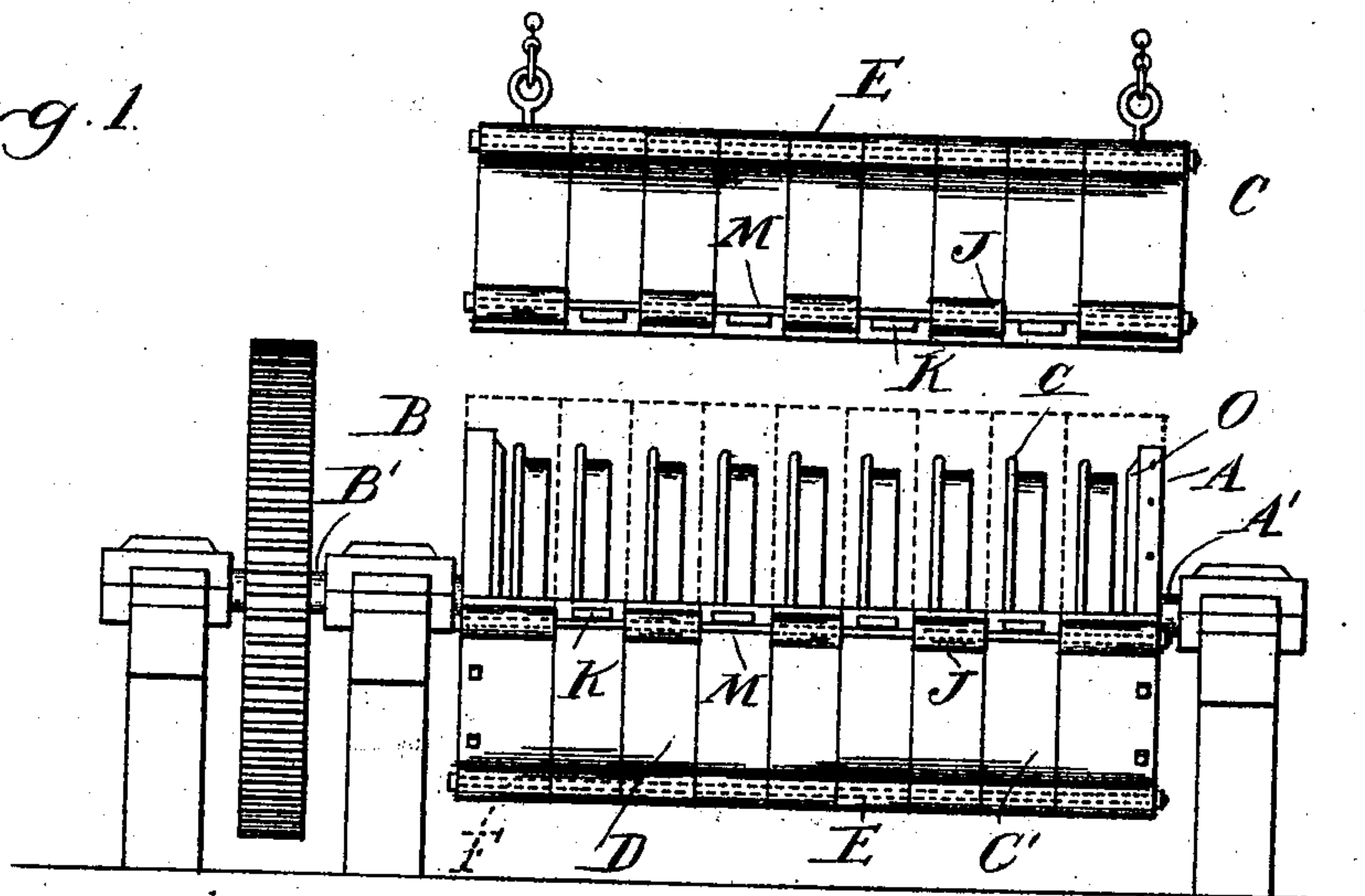


Fig. 3.

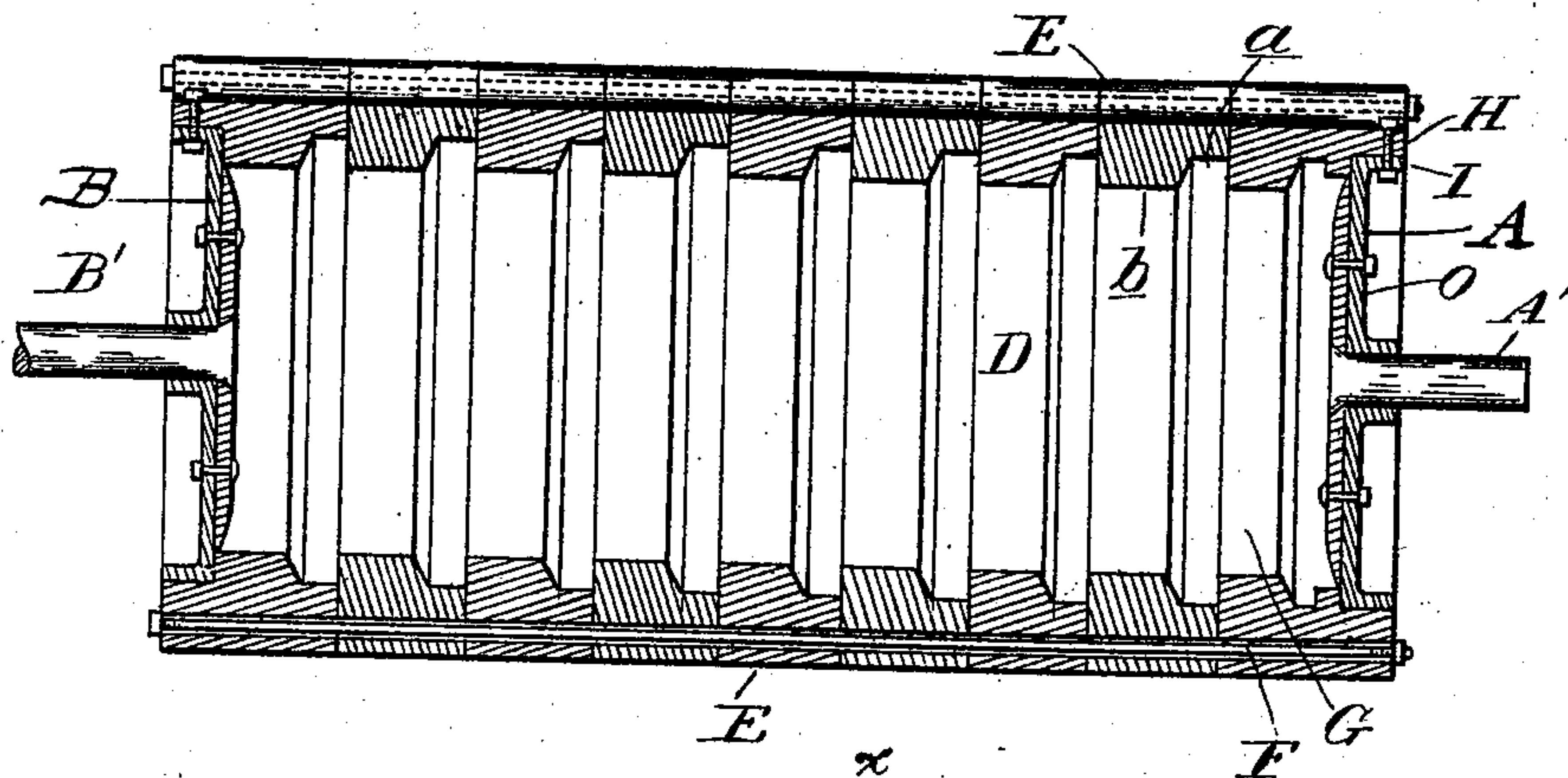
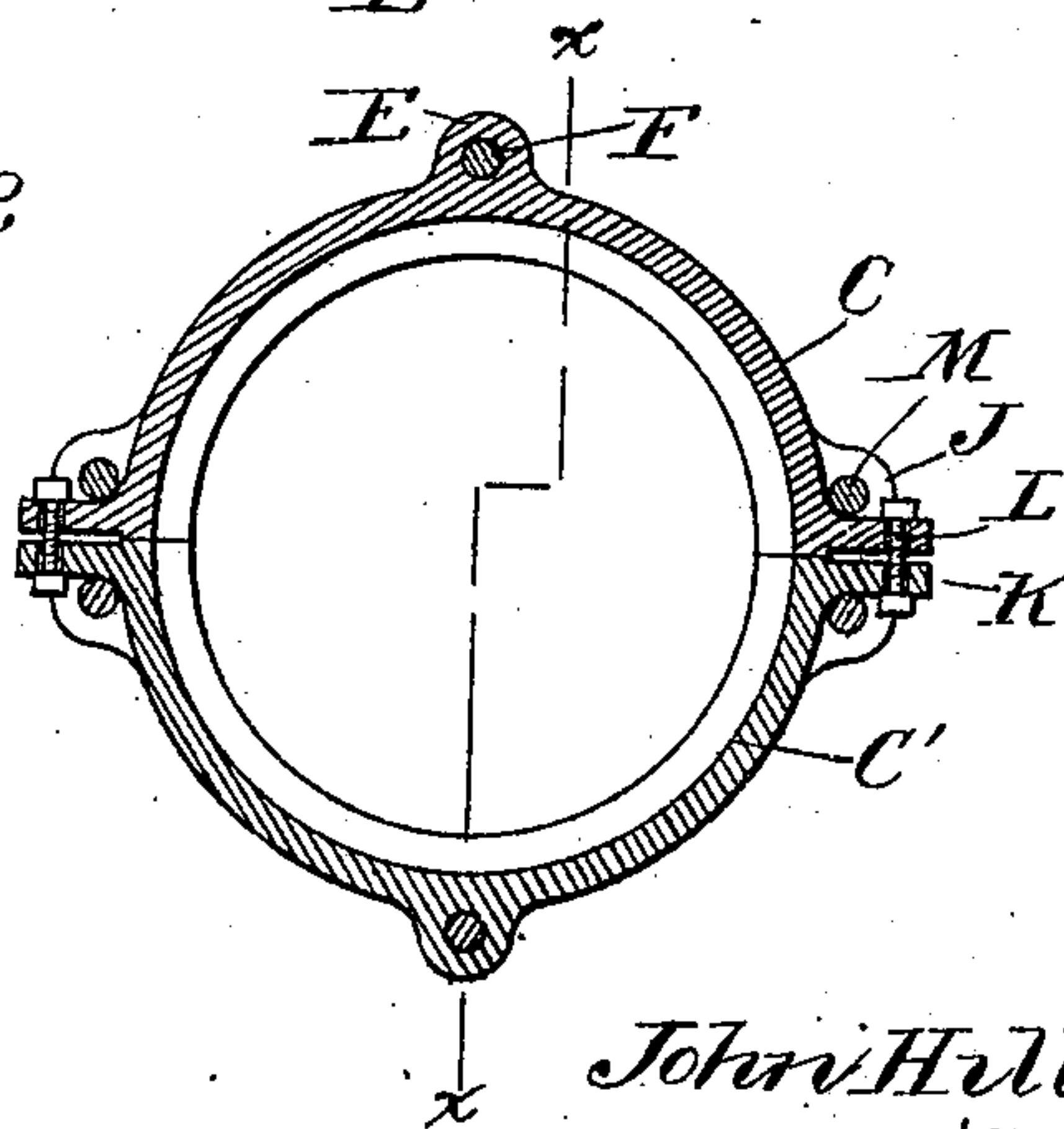


Fig. 2



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN HILL WHITING, OF DETROIT, MICHIGAN.

TUMBLING-BARREL.

SPECIFICATION forming part of Letters Patent No. 502,797, dated August 8, 1893.

Application filed March 7, 1893. Serial No. 464,975. (No model.)

To all whom it may concern:

Be it known that I, JOHN HILL WHITING, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Tumbling-Barrels, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention consists in the peculiar construction of a tumbling barrel, particularly designed for cleaning car wheel castings, and further in the construction of the tumbling barrel whereby the wheels or other articles
15 to be cleaned may be held in a fixed position therein, and separated so as to allow the moving pieces to thoroughly clean the sides of the castings, or in other words to so secure the wheels or other castings in the tumbling barrel as to cause them to form partitions, providing the tumbling barrel with a number of
20 separate compartments.

The invention further consists in the peculiar construction of the tumbling barrel in
25 sections whereby it may be made up in different lengths, or it may be easily repaired in part as it wears out.

30 The invention further consists in the peculiar construction, arrangement and combination of the various parts, all as more fully hereinafter described.

In the drawings, Figure 1 is a side elevation of my improved tumbling barrel, showing the two parts separated, and the car wheels in position. Fig. 2 is a central cross
35 section through the barrel, the two parts being locked together ready for the operation. Fig. 3 is a longitudinal section on line $x-x$ in Fig. 2.

40 My tumbling barrel consists of two heads A and B, to which are secured, centrally, in any desired manner, shafts A' and B', which form journals for the tumbling barrel, being provided with suitable driving mechanism,
45 such as shown at the left hand of Fig. 1. To these heads are secured two semi-cylindrical halves C C' of a barrel, of any desired construction. One of these halves is detachably secured to the heads, but both may be, and I
50 have shown both detachable in the drawings. They are provided also with means for securing them together when the barrel is to be ro-

tated. They are also provided with interior grooves a and flanges b . The grooves a are of a proper shape to receive the flanges c of
55 the car wheels, and the flanges or ribs b are of a width greater than the face of the tread of the wheel, so that when a number of wheels are placed into a tumbling barrel, and the two halves are clamped together about them, 60 the flanges of the wheel entering the grooves will hold the wheels apart and clamp them tightly in position, so that the material which is placed between will thoroughly cleanse both sides of each wheel by tumbling against
65 the same in the usual manner.

In manufacturing my tumbling barrel I preferably make each half in corresponding sections D, each section being provided with a central apertured lug or rib E, through
70 which the tie bolts F pass. The end sections G are provided with an overhanging flange H adapted to be bolted to a corresponding flange I on the heads. At the edges of each half I preferably provide every other section
75 D with an apertured lug or rib J, while the alternate sections are provided with the laterally extending flanges K, through which the clamping bolts L pass for clamping the two halves together, tie rods M passing through
80 the sleeves J and over the flanges K, as plainly shown in Figs. 1 and 2, firmly tying together all the sections of each half. This enables me to make up a tumbling barrel of any desired length, that is, I can arrange one for
85 one wheel, two wheels, or nine more or less. The interiors of the heads are preferably provided with wear plates O.

The parts being thus constructed their operation is as follows: One half of the tum-
90 bling barrel is usually left permanently connected with the heads, as shown in Fig. 1. The wheels are then rolled up an inclined way and into that half with their flanges engaging in the grooves a until the tumbling
95 barrel is filled, as shown in Fig. 1. The scrap material is then filled in between the wheel, the upper half is lowered and the two halves secured together by means of the clamping bolts L.

What I claim as my invention is—

1. In a longitudinally divisible tumbling barrel, the combination with the barrel having closed sides of means for clamping the parts

together, and continuous ribs and grooves for holding the articles to be cleaned in fixed position within, substantially as described.

2. In a tumbling barrel, the combination of
5 two imperforated halves, means for clamping the halves together, and separated continuous bearings in each half, of a shape corresponding to the periphery of a car wheel, substantially as described.
- 10 3. In a tumbling barrel, the combination of the heads, of two semi-cylindrical imperforated halves, consisting of segmental circular sections clamped together and secured to the heads, substantially as described.
- 15 4. The combination of two heads, of shafts centrally secured to said heads and means for imparting motion thereto, and two semi-cylindrical imperforated halves composed of segmental circular sections, clamped together
20 and secured to heads and means for securing the two faces together, substantially as described.

5. In a tumbling barrel, the combination of

the heads, the two semi-cylindrical halves, detachably secured together and to the heads, 25 each half composed of a series of segmental circular sections having complementary grooves and flanges *a* and *b*, substantially as described.

6. In a tumbling barrel, the combination of the heads, of the semicylindrical halves com- 30 posed of sections *D* having the centrally apertured ribs *E*, the tie bolts *F* passing through said ribs and clamping the sections together, the marginal apertured ribs *J* and flanges *K* on the alternate sections and the tie bolts *M* 35 passing through the ribs and over the flanges and the clamping bolts *L*, substantially as described.

In testimony whereof I affix my signature in presence of witnesses.

JOHN HILL WHITING.

Witnesses:

GEO. A. TRUE,
F. A. SMITH,
FRED. CHRISTIE.