

(No Model.)

J. T. CARTER.
TOBACCO CASING MACHINE.

No. 474,650.

Patented May 10, 1892.

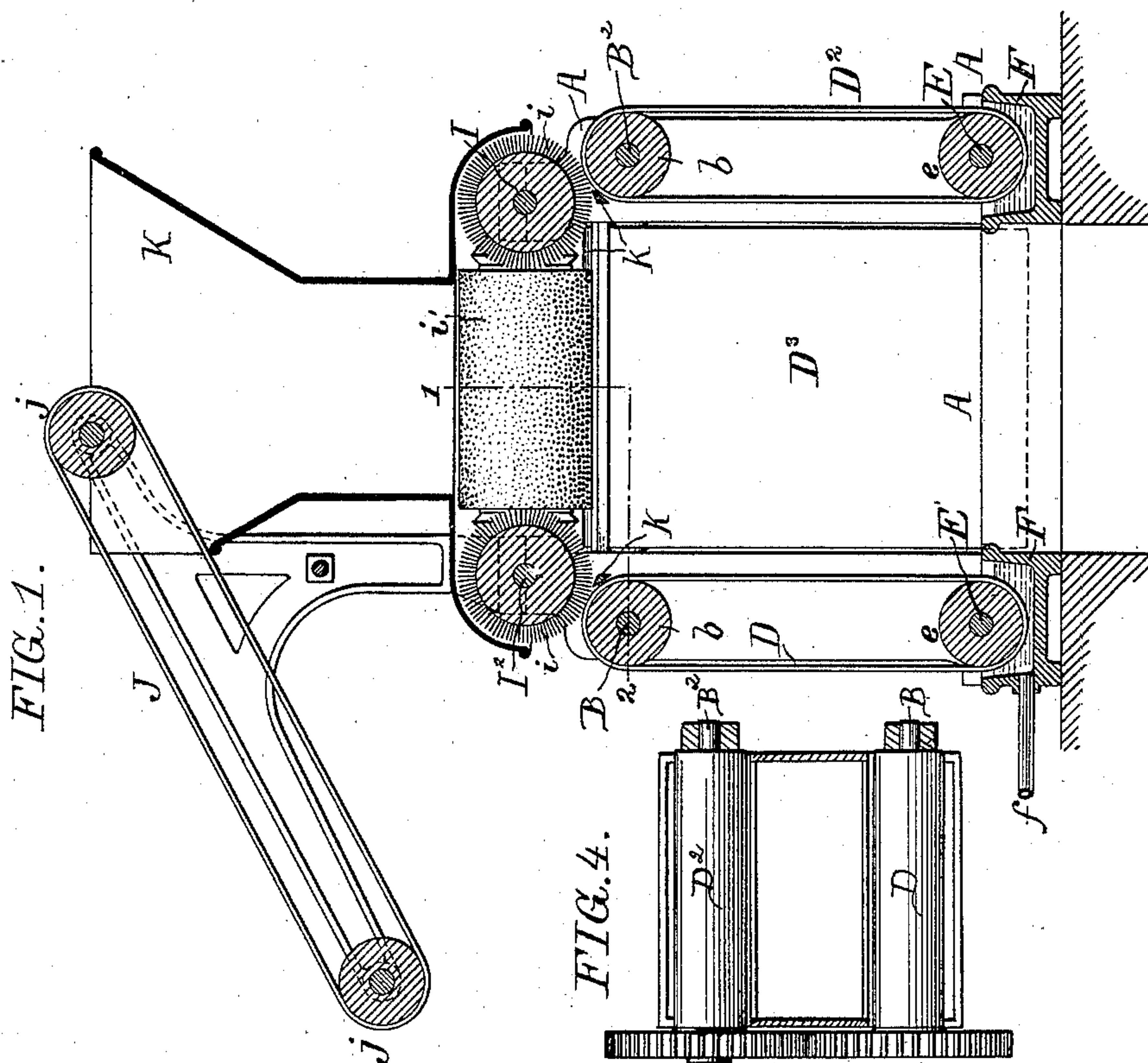
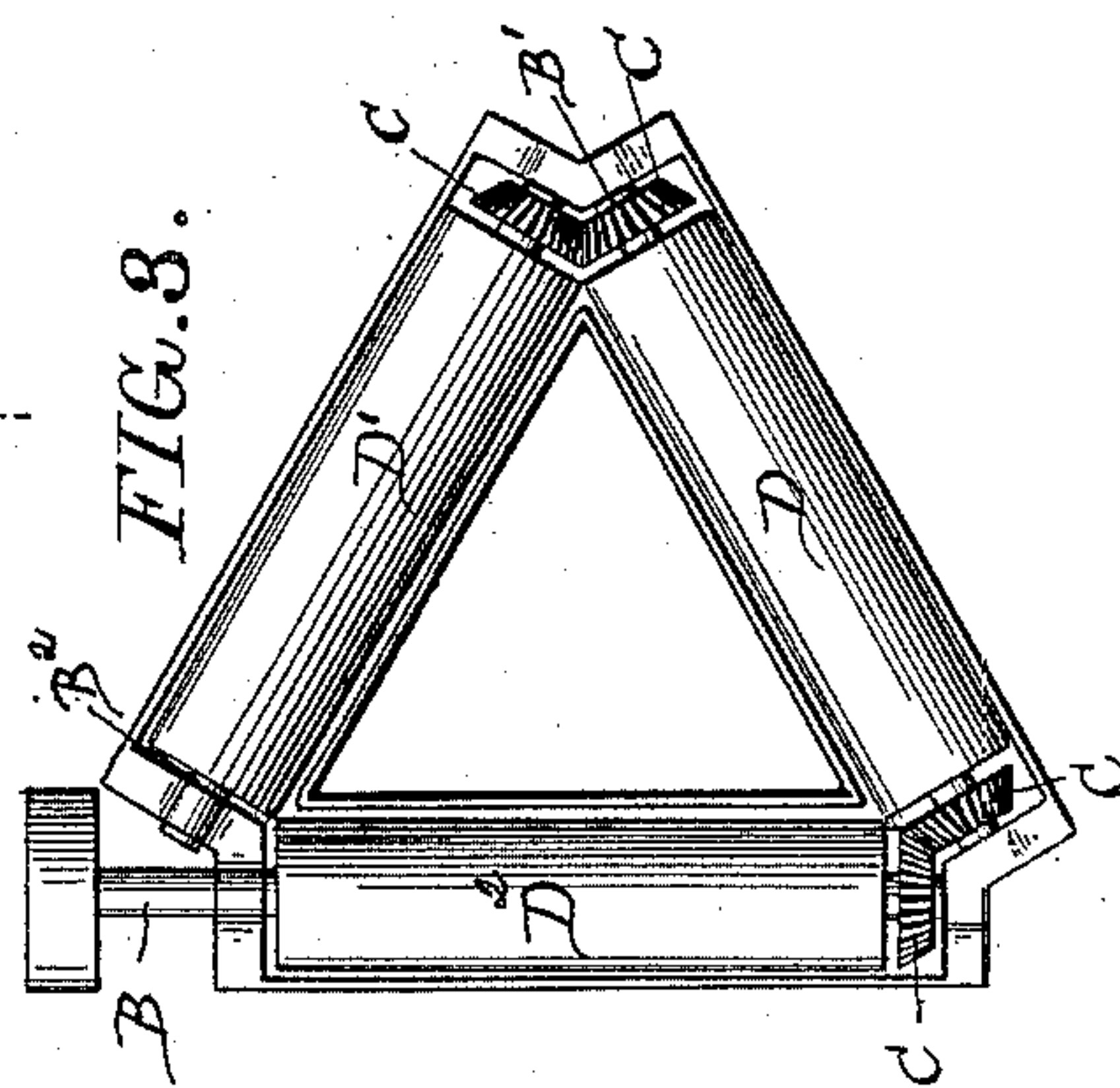
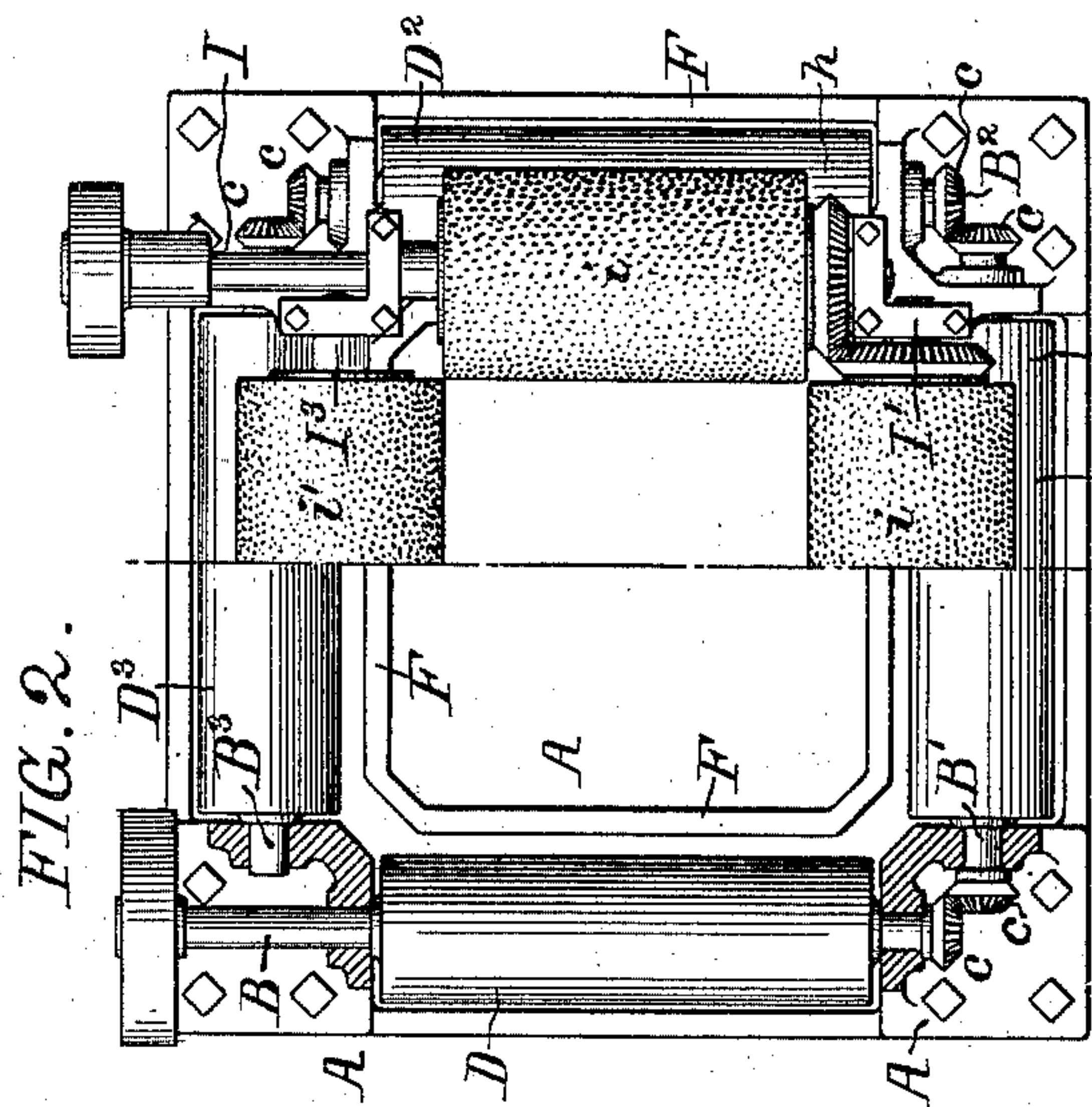
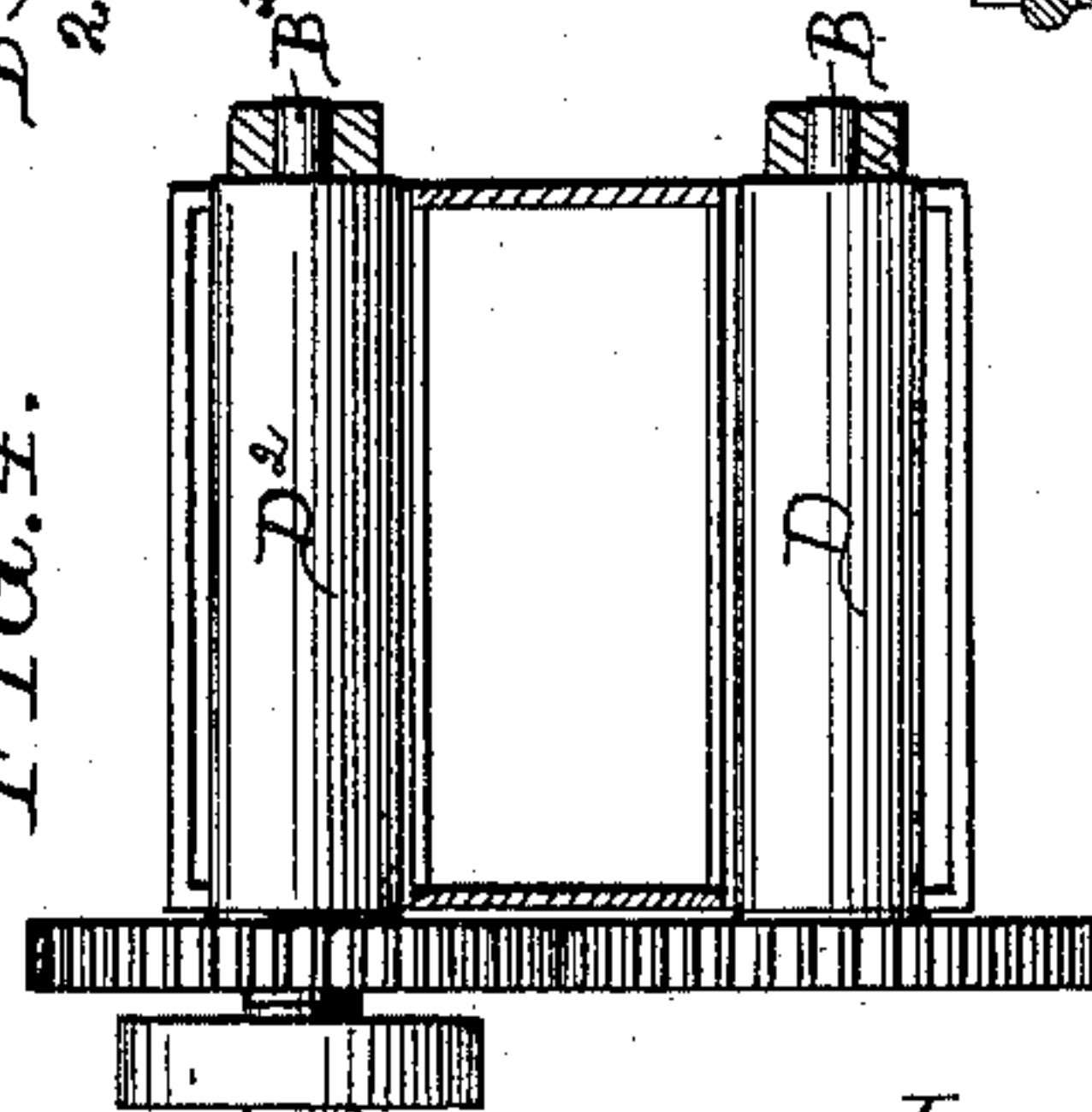


FIG. 4.



Witnesses:
Hamilton W. Turner.
Fred H. Goodwin

Inventor
John T. Carter
By his Attorneys
Hosson & Hosson

UNITED STATES PATENT OFFICE.

JOHN T. CARTER, OF DANVILLE, VIRGINIA.

TOBACCO-CASING MACHINE.

SPECIFICATION forming part of Letters Patent No. 474,650, dated May 10, 1892.

Application filed October 22, 1891. Serial No. 409,529. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. CARTER, a citizen of the United States, and a resident of Danville, Pittsylvania county, Virginia, have invented certain Improvements in Tobacco-Casing Machines, of which the following is a specification.

The object of my invention is to thoroughly case or spray the leaves of tobacco in such a manner that they will be coated on both sides, as fully described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical sectional view of my improved tobacco-spraying machine. Fig. 2 is a plan view, partly in section, on the line 1-2, Fig. 1, with the hopper removed. Fig. 3 is a plan view showing a three-belt machine, and Fig. 4 is a view showing a two-belt machine.

A is the frame, of any suitable construction, on which are mounted the shafts B, B', B², and B³, having rollers or belt-pulleys *b*. Over these belt-pulleys pass belts D, D', D², and D³, made of any suitable material, for the purpose specified. These belts extend down and around rollers *e* on shafts E. (Clearly shown in Fig. 1.) These shafts are mounted in a quadrangular trough F, having a hollow center for the passage of the tobacco. This trough contains the liquid which is to be spread upon the leaves of the tobacco as they pass through the machine and is connected with the supply by the supply-pipe *f*. The shafts B B' B² B³ are geared together in the present instance by bevel-gears *c*, Fig. 2, the shaft B being the driving-shaft. The shafts will all turn in unison, and as they rotate the several belts will carry liquor from the trough up to the spraying mechanism, which I will now proceed to describe. Situated above the belt-shafts are shafts I I' I² I³, carrying brushes *i*. The shaft I is driven and is geared to the shafts I' I² I³ by bevel-gears *h* in the same manner as the shaft B is geared to its shafts. These brush-shafts are so arranged in respect to the belts that they remove a certain amount of the liquor from the belts and spray it toward the center of the quadrangular compartment formed by the four belts. I prefer to arrange a bar *k* in the path of each brush, so as to cause the liquor to be forced toward the tobacco by the spring of the bristles of the brush.

J is the feed-belt carrying the leaves to the machine, which are placed on said belt by an attendant. This belt is driven slowly in any suitable manner and passes over rollers *j j*, as clearly shown in Fig. 1. A hopper K is preferably mounted above the brushes to guide the leaves to the center of the machine.

The operation of the machine is as follows: The liquor is placed in the trough F, and the belts D, D', D², and D³ are set in motion and carry the liquor up to the spraying-brushes or other spraying devices, which throw the liquid toward the center of the machine in a fine spray. The leaves are then placed on the endless belt J and fed toward the center of the machine and fall from the endless belt into the hopper, and as they fall they pass the spraying devices and are cased on both sides by the liquor. The leaves are carried away from the machine in any suitable manner, either by an endless belt or by a car, depending upon circumstances.

It is not essential in carrying out my invention that four belts should be used, as a machine having three belts, as shown in Fig. 3, forming a triangular passage-way, may be used, and, in fact, in some instances a machine having two belts, as shown in Fig. 4, may be used; but I prefer a machine constructed in accordance either with Fig. 1 or Fig. 3, such construction insuring a thorough casing of both sides of the leaf. The sprayed liquor that does not come in contact with the leaves in their passage through the machine strikes the opposite belt and is used over again, thus preventing waste of the spraying-liquor.

I claim as my invention—

1. The combination, in a tobacco casing or spraying machine, of two liquid-delivering belts arranged opposite each other, mechanism for driving said belts, and mechanism for removing the liquor carried by each belt and projecting it into the space between the belts, whereby when the tobacco-leaf is fed between the belts it will be sprayed on both sides, substantially as described.

2. The combination of the two vertical belts arranged opposite each other, mechanism for driving said belts, a liquor-trough for supplying the belts with liquor, and mechanism for removing the liquor from each belt and projecting it into the space between the belts,

said belts being so arranged in respect to each other that the liquor sprayed from one belt which escapes the leaves will be caught by the opposite belt, substantially as described.

5 3. The combination of the frame, the shafts thereon, the vertical belts carried by said shafts, a trough for supplying the belts with liquor, spraying-brushes arranged above the belts, and a feed device for directing to the
10 center of the machine the tobacco-leaves which are to be cased, substantially as described.

4. The combination of the frame, the four vertical belts, shafts on which said belts are mounted, said belts forming a quadrangular
15 opening for the passage of the tobacco-leaves, a quadrangular trough into which the lower portions of the belts extend, gearing for driving the belts, spraying-brushes arranged above the belts and adapted to spray the liq-
20 uor carried by the belts on the leaves as they pass through the machine, and gearing for driving said spraying device, substantially as described.

5. The combination, in a tobacco-spraying
25 machine, of the frame, the four vertical belts forming a quadrangular opening for the passage of the leaves, shafts over which the belts

pass, a quadrangular trough for the liquor at the base of the machine, from which the belts carry the liquor to the spraying mechan- 30
ism, spraying-brushes arranged above each shaft, driving mechanism therefor, and an endless belt for feeding the leaves to the machine, the whole being so arranged that the leaves as they pass between the belts will be 35
thoroughly cased with the liquor and the liquor that does not strike the leaves will be prevented from escaping, substantially as and for the purpose set forth.

6. The combination of the frame, the shafts 40
thereon, the vertical belts carried by said shafts, a trough for supplying the belts with liquor, spraying-brushes arranged above said belts, and bars arranged in front of said belts and in contact with the brushes, substan- 45
tially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN T. CARTER.

Witnesses:

HENRY HOWSON,
WILLIAM D. CONNER.