

No. 636,553.

Patented Nov. 7, 1899.

J. C. POWELL.
ADVERTISING APPARATUS.

(Application filed July 18, 1899.)

(No Model.)

2 Sheets—Sheet 1.

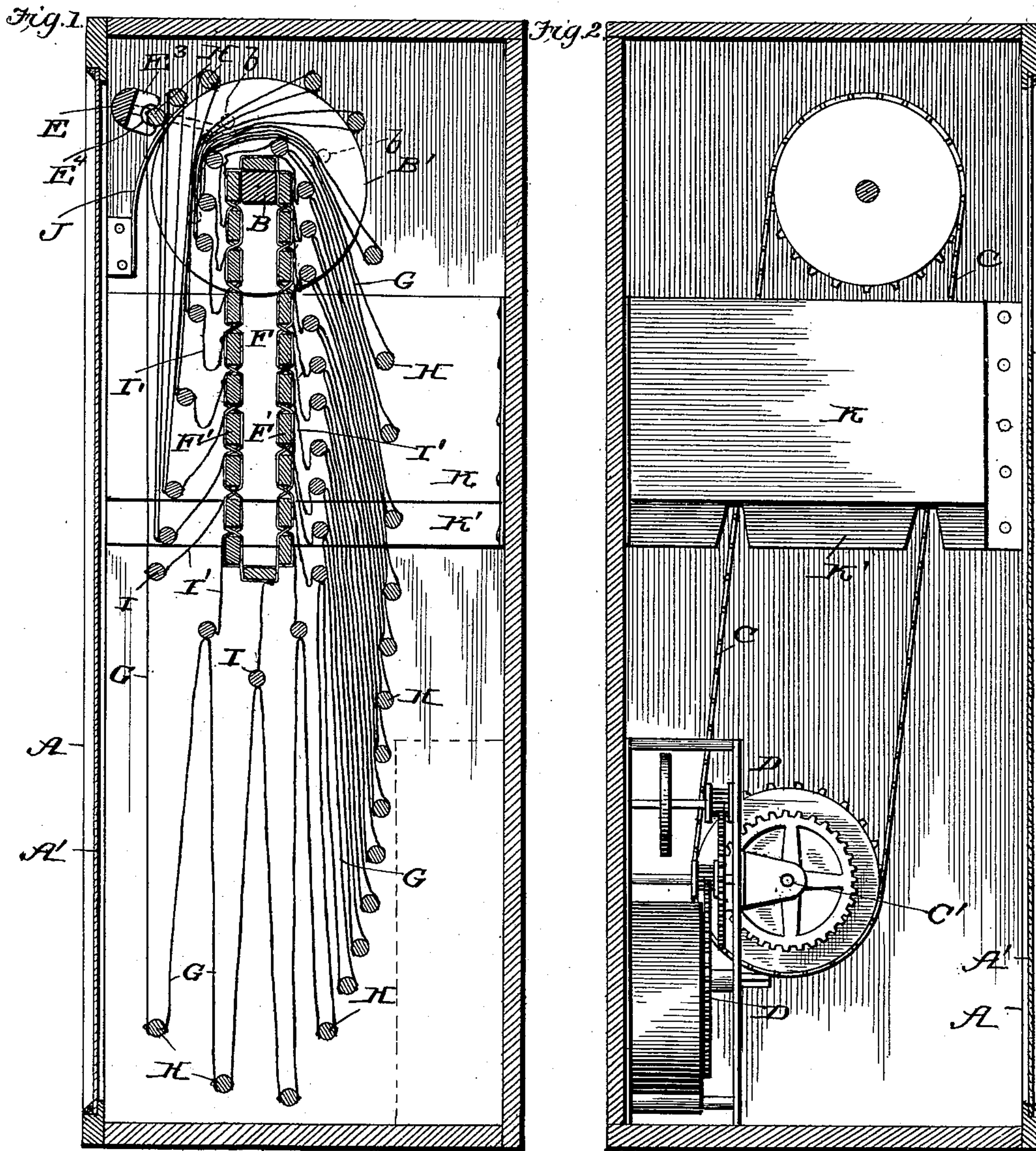
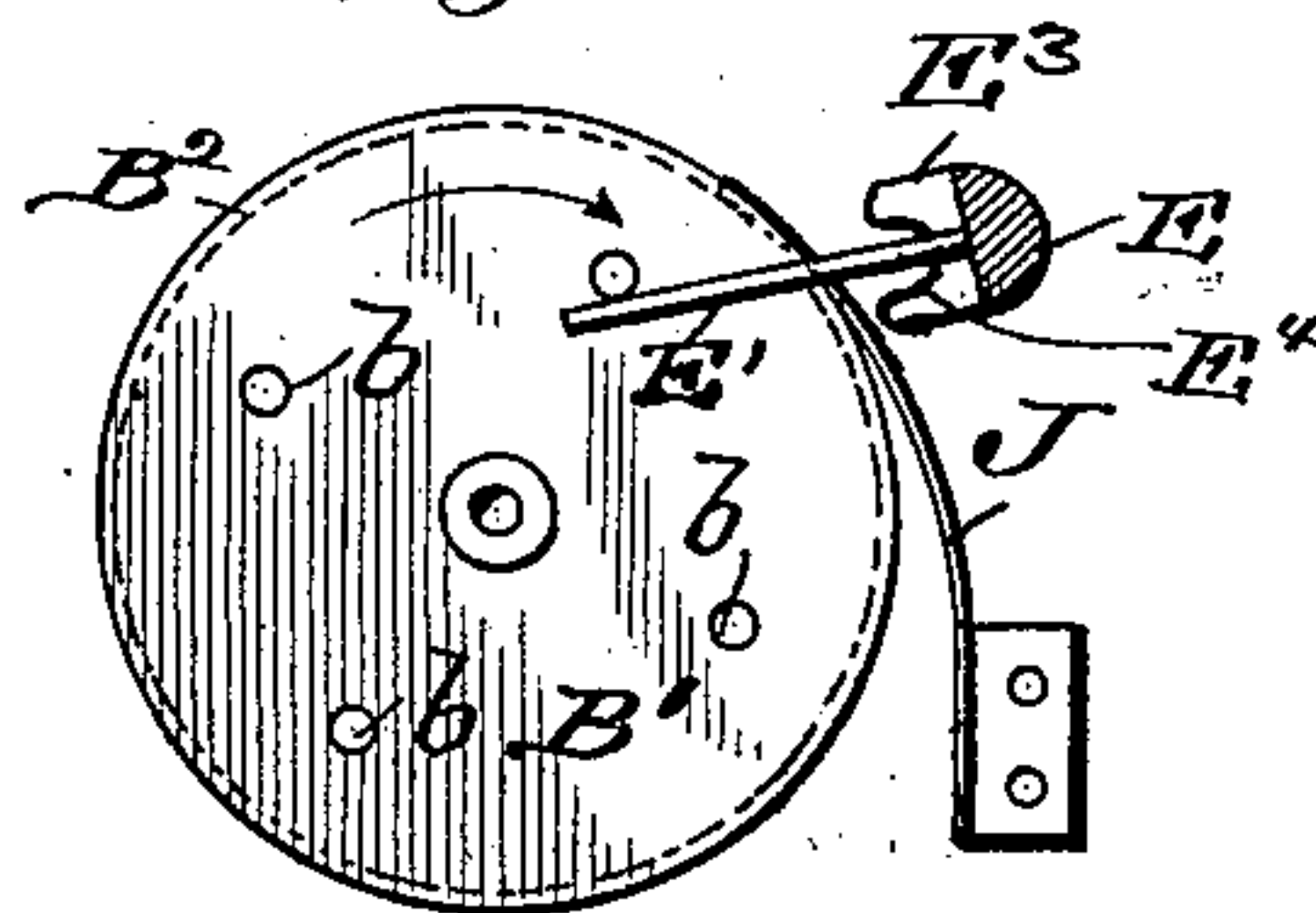


Fig. 3.



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No. 636,553.

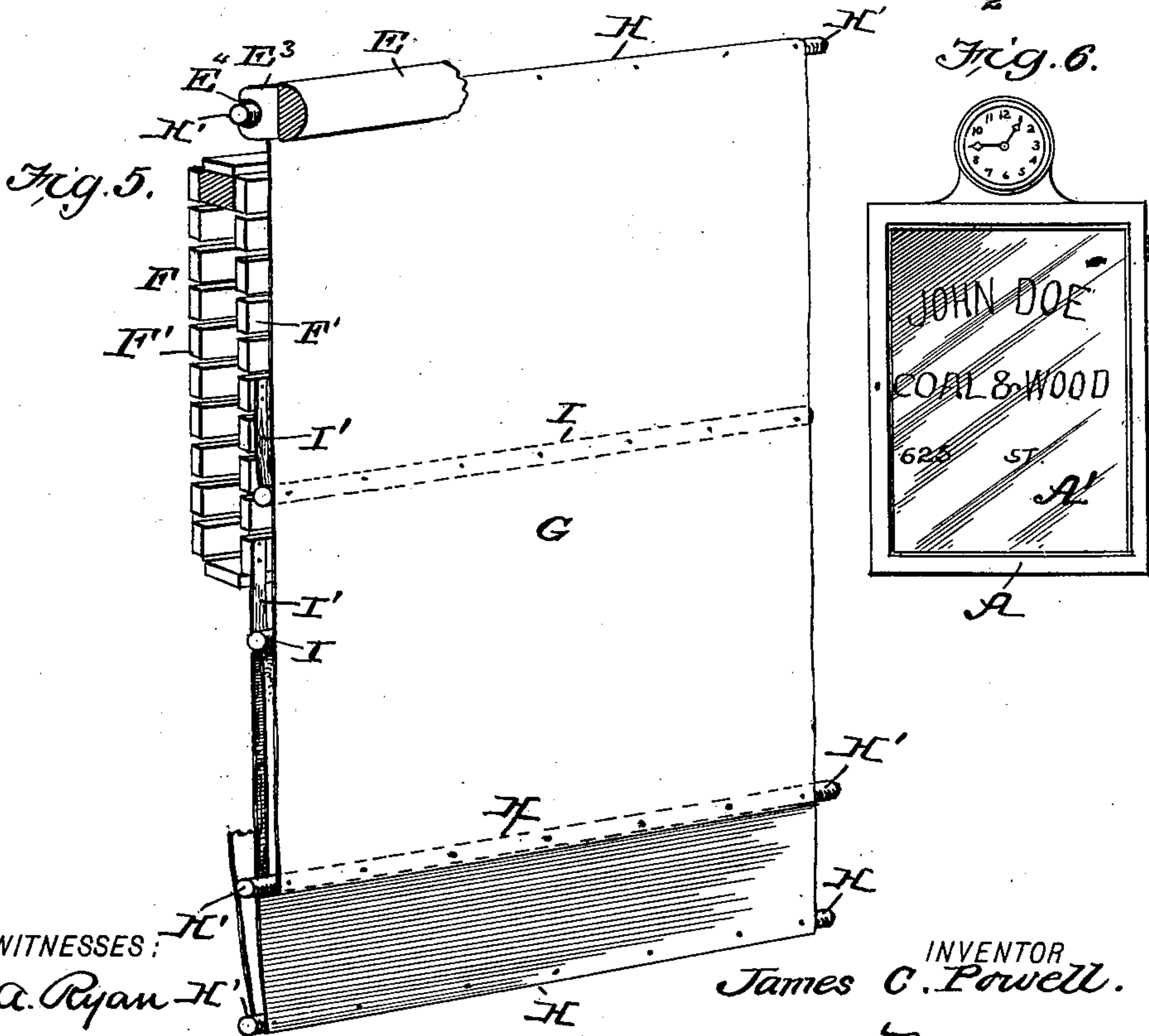
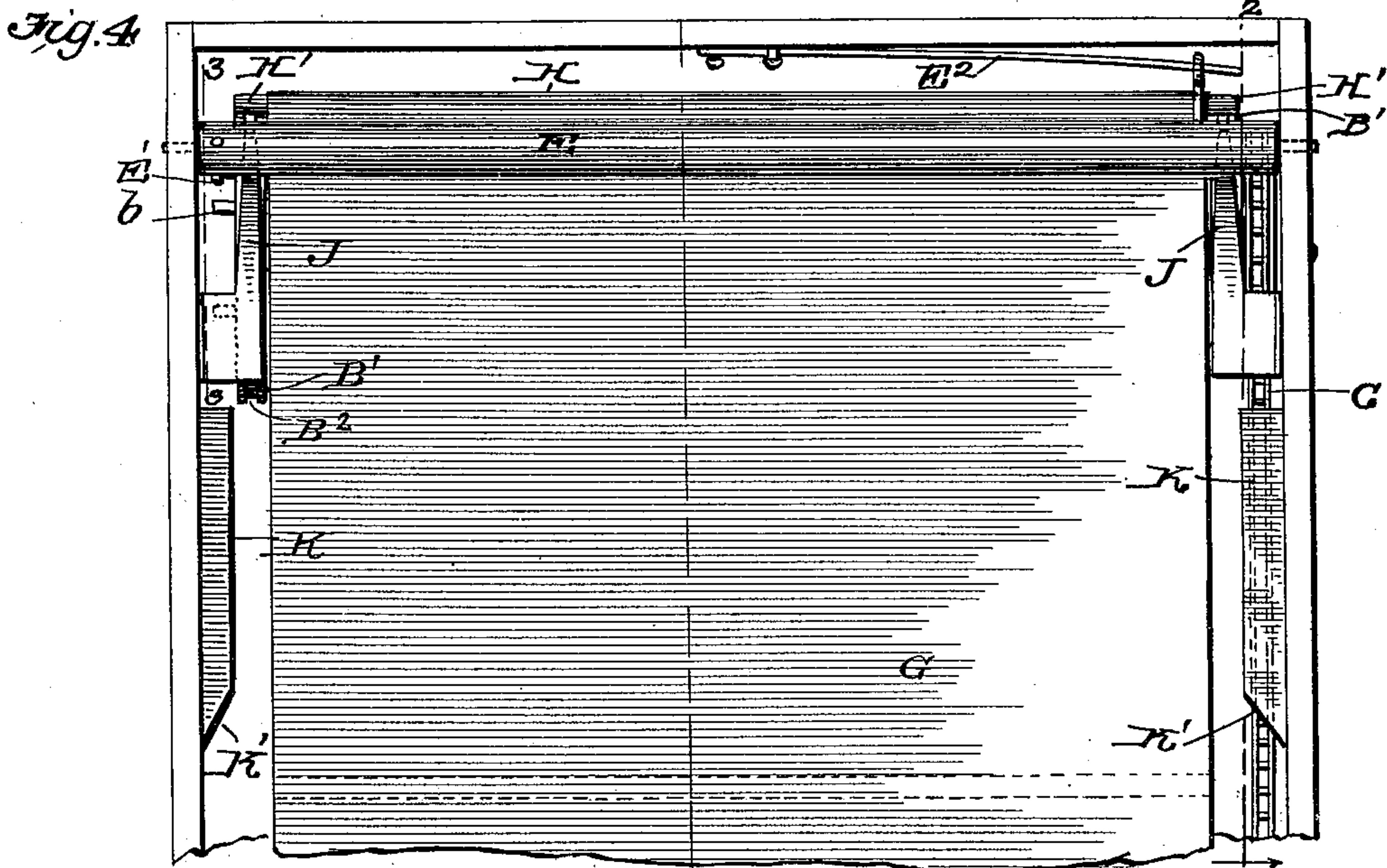
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(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

JAMES C. POWELL, OF MACON, GEORGIA.

ADVERTISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 636,553, dated November 7, 1899.

Application filed July 18, 1899. Serial No. 724,296. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. POWELL, residing at Macon, in the county of Bibb and State of Georgia, have made certain new and useful Improvements in Advertising Apparatus, of which the following is a specification.

My invention is an improvement in advertising apparatus for exhibitors having for an object to provide a simple construction by which a series of advertising sheets or banners may be successively displayed; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a central vertical section of an apparatus embodying my invention. Fig. 2 is a sectional end elevation on about the line 2 2 of Fig. 4. Fig. 3 is a detail section on about line 3 3 of Fig. 4. Fig. 4 is a face view of the upper portion of the apparatus. Fig. 5 is a detail perspective view showing the apron and parts of three sheets or banners connected therewith, and Fig. 6 is a face view of the apparatus.

In carrying out my invention I provide a suitable casing, which may be supplied, as shown, with the door A, glazed at A' and presenting a large opening by which to expose the advertising sheets or banners, presently described.

An operating-shaft B is suitably supported and driven, being preferably geared by a sprocket-chain C with a counter-shaft C', which is driven by a clock-train D, which may be of any suitable construction adapted to turn the operating-shaft B at the desired speed. This shaft B is preferably angular in cross-section. It may be square, as shown, or of other desired form, to drive the apron, presently described, which apron is composed of connected slats which correspond with the angular faces of the operating-shaft. The operating-shaft B is provided at its ends with the pulleys or wheels B', upon which ride the end rods of the sheets or banners, presently described, and at one end the shaft is provided with pins or projections b, of which I furnish one for each face of the operating-shaft. These pins or projections engage a rod E', projecting from the rock-shaft E, which is actuated in one direction by a spring

E² and is provided with the plates E³, notched at E⁴ to receive the ends of the end rods of the sheets or banners and operate somewhat after the fashion of an escapement in permitting the successive dropping of the end rods of the banners, as will be more fully described hereinafter. By the described construction it will be understood the operating-shaft is suitably turned, and as it turns it causes the rock-shaft to operate in such manner as to throw its notched plates which project toward the operating-shaft first down and then up to properly release the end rods of the banner.

The endless apron F is composed of the connected slats F' and is suspended on the operating-shaft, so it will be given motion as the said shaft is turned in the manner before described.

The advertising sheets or banners G are carried by the apron and are connected at their ends in such manner as to form an endless belt fitting around the apron, and flexible connections are provided between the middles of said banners and the apron, so the banner when displayed can drop full length across the sight-opening through which it is exposed to view.

In the specific construction shown I provide end rods H at the meeting ends of the adjoining banners. These end rods H are extended sufficiently at their ends beyond the sides of the banner to furnish portions for engagement by the notched plates on the rocking escapement-shaft.

Rods I are provided at the middles of the banners, and each of said rods I is connected with one of the slats of the endless apron by means of tapes or other suitable flexible connections I', which are of sufficient length to permit the middles of the banners to swing forward when the banners are dropped to exposed position to avoid any break in the banner from its upper to its lower end.

By the described construction it is evident each of the end rods H forms the upper border of one banner and the lower border of the succeeding banner. It is my purpose in practice to make the sheets or banners of silk or other suitable material, when desired, in contrasting colors, and to print, embroider, or otherwise produce the advertising or other

matter which it may be desired to display upon the said banners.

Pulleys B', upon which the end rods ride in the operation of the apparatus, are grooved
5 at B² to receive the pointed ends of the stripping-plates J, which operate to strip the rods from the pulleys B' and properly guide them into engagement with the notched plates E³, before described.

10 Guide-plates K are provided on opposite sides of the endless belt formed by the connected banners, and have at their lower ends inclined portions K', which properly direct the end rods H between the guide-plates K,
15 which operate to hold the said rods in position to properly direct them to the pulleys B', before described.

In the operation of the improved apparatus the endless apron operates to move the banners around with it by means of the flexible
20 connections which join the middle rods of the banners to the said apron. As the banners are moved around with the apron the end rods H are brought successively up in rear of the apron until their ends H' ride upon and
25 over the pulleys B' from rear to front and are caught successively in the notches E⁴ of the plates E³, which plates are moved by their supporting rock-shaft in such manner as to
30 drop one rod H and then spring back in position to receive the next rod H, and so on successively. By this operation the banners or sheets are exposed one after the other. It will be noticed that the flexible connections
35 of the banners at their middles with the apron results in each banner being brought down about half-way between the upper and lower ends of the exhibitor before the lower end rod of such banner is released by the notched
40 plates, so that when the said rod is released it will drop the full length of the banner, and thus expose in an instant the entire surface of the banner. This full-length drop is an important feature of my invention, because
45 thereby I am able to expose instantaneously the entire surface of the banner or sheet and also to secure so extensive a movement of the parts as to attract the eye of the observer.

When the clockwork is wound, the apparatus
50 will operate until it is run down to automatically expose the several banners successively and will not require any attention except rewinding.

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

1. An advertising apparatus or exhibitor comprising an endless apron, means for driving the same, flexible sheets or banners connected
60 at their middles with said apron, and mechanism for controlling the ends of the sheets or banners substantially as set forth.

2. An advertising apparatus or exhibitor comprising an operating-shaft, an endless
65 apron carried thereby, the sheets or banners suspended loosely at their middles from the endless apron, rods at the ends of said banners,

and means for releasing said rods successively substantially as set forth.

3. An advertising apparatus or exhibitor
70 comprising an endless apron, means for driving said apron, sheets or banners connected at their ends forming an endless belt around the apron, and means connecting the banners at their middles to the endless apron substantially as set forth. 75

4. An advertising apparatus or exhibitor comprising the endless apron and the banners connected together and to the apron and forming an endless belt encircling the apron substantially as set forth. 80

5. An advertising apparatus or exhibitor comprising the endless apron, driving mechanism, the sheets or banners connected at their ends and provided at their meeting ends
85 with rods adapted to be successively released, rods at the middles of said banners, and flexible connections between said middle rods and the endless apron substantially as set forth.

6. An advertising apparatus or exhibitor
90 comprising the endless apron, means for driving the same, the sheets or banners provided with the rods projecting at their ends, the rock-shaft having escapement devices for successively releasing such rods, and means for
95 operating the rock-shaft substantially as set forth.

7. An advertising apparatus or exhibitor comprising the flexible sheets or banners, the endless apron, and flexible connections between the middles of said banners and the
100 endless apron, and operating devices substantially as set forth.

8. An advertising apparatus or exhibitor comprising the operating-shaft, the pulleys
105 or wheels at the ends thereof, the apron the banners connected with said apron and provided with the rods extended at their ends to ride upon the wheels or pulleys, the rock-shaft provided with notched plates or seats by
110 which to successively release the said rod and means for operating said rock-shaft substantially as set forth.

9. In an advertising apparatus or exhibitor the combination of the endless apron, the operating-shaft supporting the same, the sheets
115 or banners provided at their middles with rods, flexible connections between said rods and the endless apron, the rods at the ends of the banners and the rock-shaft provided with means by which to release the said end
120 rods successively substantially as set forth.

10. In an advertising apparatus or exhibitor the combination of the endless apron, the sheets or banners carried thereby and having
125 end rods, the operating-shaft supporting said apron and provided with wheels or pulleys on which the end rods operate, the stripping-plates by which to strip the rods from said wheels or pulleys, and the escapement rock-
130 shaft provided with means by which to successively release the end rods of the banners substantially as set forth.

11. In an advertising apparatus or exhibitor

the combination of the endless apron, the operating-shaft therefor having end pulleys or wheels, the sheets or banners connected with the apron and having end rods, the guide-plates arranged on opposite sides of the path of said rods and adapted to guide the same, and the escapement rock-shaft by which to

release the said rods successively and means for operating said rock-shaft substantially as set forth.

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Witnesses:

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