

E. McCLUNG.

DOOR SIGN.

APPLICATION FILED OCT. 7, 1911.

1,029,506.

Patented June 11, 1912.

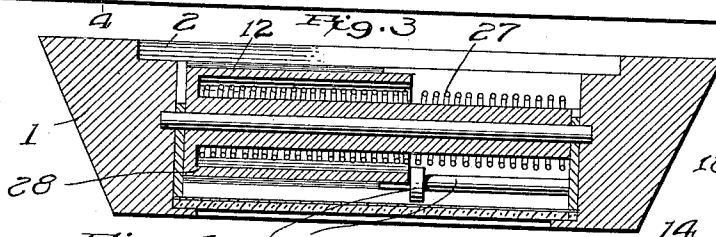
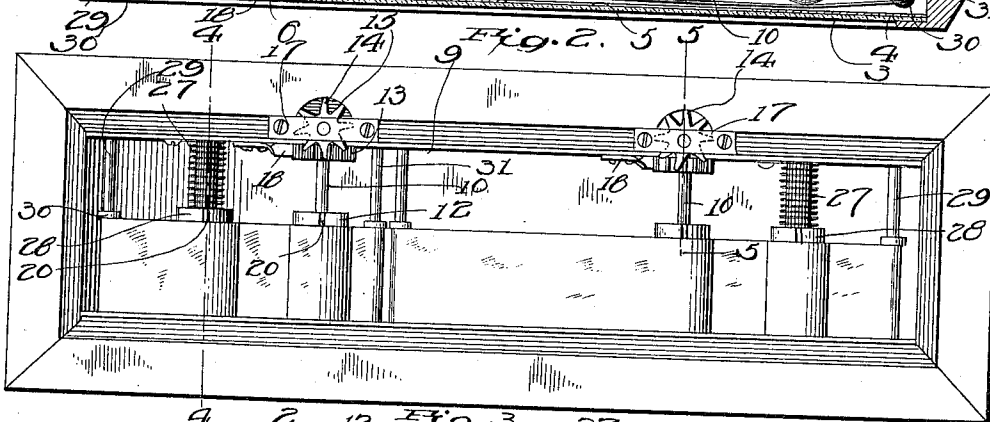
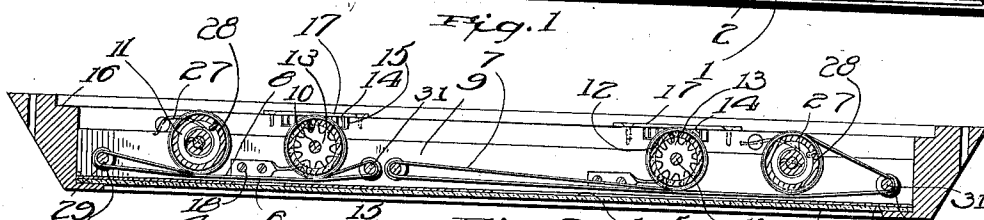
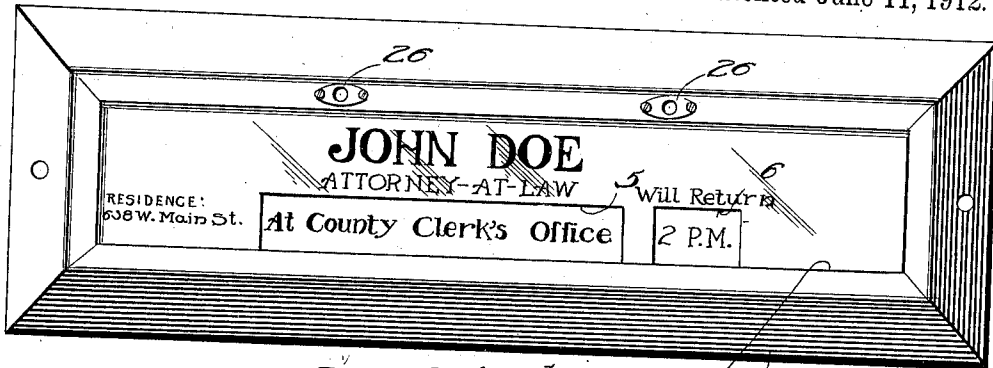
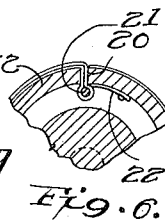
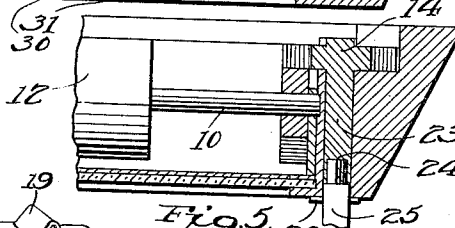


Fig. 4

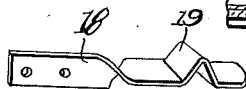


WITNESSES

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Fig. 7



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UNITED STATES PATENT OFFICE.

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DOOR-SIGN.

1,029,506.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EMORY McCLUNG, a citizen of the United States, residing at Clarksburg, in the county of Harrison and State of West Virginia, have invented certain new and useful Improvements in Door-Signs, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to changeable indicators, and has for its object the production of an indicator which is simple in construction, efficient in operation, and consists of a minimum number of parts.

15 Another object of this invention is the provision of means for facilitating the operation of the changeable exhibitor from the outside of the casing through the medium of a key.

20 With these and other objects in view, this invention consists of certain novel constructions, combinations and arrangements of parts as will be hereinafter fully described and claimed.

25 In the drawings:—Figure 1 is a front view of the exhibitor. Fig. 2 is a longitudinal section thereof. Fig. 3 is a rear view of the exhibitor. Fig. 4 is a section taken on line 4—4 of Fig. 3. Fig. 5 is an enlarged section taken on line 5—5 of Fig. 3. Fig. 6 is an enlarged fragmentary sectional view of one of the operating rollers showing the connecting means for the fabric. Fig. 7 is a detail perspective of one of the friction
35 pawls adapted to retard the motion of the rollers carrying the fabric apron.

Referring to the drawings by numerals 1 designates the casing which is provided with an opening 2 covered by a plate of glass 3 behind which is placed a sign 4. This sign is intended to contain the name of the party owning the same, and in this sign is placed a plurality of openings 5 and 6. Aprons 7 and 8 are operated in the rear
45 of the openings 5 and 6 and contain certain printed matter setting forth the time of the party's return to the office and other information which is desired.

Bars 9 extend longitudinally of the frame 1, and support the ends of the various rollers hereinafter described. The rollers are arranged in two series as clearly illustrated in Figs. 2 and 3, each series of rollers controlling one apron containing the desired

printed matter. For the purpose of illustration, one series of rollers contains an apron having printed thereon the words "Out of the city, return September" and the other rollers contain an apron having numbers arranged thereon to correspond with the date upon which the party will return. Each of the series of rollers above mentioned comprise an operating roller 10 and a tension roller 11. The operating roller 10 is provided with an apron carrying portion 12 and this roller carries near one end a primary gear 13 which gear meshes with an auxiliary star gear wheel 14. The wheel 14 is placed within a socket 15 so as to allow the same to be held flush with the surface of the back of the frame 1. A ledge 16 is formed all around the inner edge of the frame 1, and upon this ledge fits a plate 17 for holding the auxiliary gear wheel 14 in place within the socket 15. In this way the plate as well as the auxiliary gears will not project above the rear face of the frame 1. A friction retarding pawl 18 is secured to one side of the frame 1 and is provided with an upwardly bent tooth portion 19, which tooth portion engages the teeth of the primary gear wheel 13 for retarding the rotary movement thereof. The apron carrying portion 12 is provided with a longitudinally extending slot 20 within which is placed the end of the apron and a tin or other filler 21 is carried by each end of the apron so as to prevent the end of the apron from being pulled through the slot 20. A plate 22 is secured to the inner face of the apron carrying portion 12 and is adapted to engage the end of the apron for assisting in holding the same in its correct position as clearly illustrated in Fig. 6. Both the tension rollers as well as the operating rollers are provided with these slots 20 and the ends of the endless apron are held in their correct position through the same means as described and illustrated in Fig. 6.

The gear wheel 14 is provided with a forwardly extending stem 23 which stem is also provided with a socket 24 for receiving a key 25. The key 25 passes through a plate 26 which is placed upon the outer face of the frame or casing 1 for protecting the aperture leading to the depending shaft 23 of the auxiliary gear 14. It will there-

fore be obvious that by inserting the key 25 within the aperture formed in the plate 26, the auxiliary gear 14 may be rotated thereby imparting rotary movement to the operating roller 10. Of course, each of the operating rollers is operated in the same manner as just described.

A spring 27 is wound upon the tension roller as illustrated in Figs. 2 and 3 having one end thereof connected to the side of the casing 1 and the other end thereof connected to the apron supporting portion 28 of the tension roller. As stated above the end of the apron is secured thereto in the same manner as described in connection with the drive roller. A guiding shaft 29 is carried near one end of the casing and to one side of the tension roller for allowing the apron to pass over the same and keep the apron in its correct aligned position through the medium of the collar 30 formed thereon. A guide shaft 31 is also placed upon the opposite side of the drive roller 10 over which the apron is also adapted to pass. The spring 27 has its inner end placed within the hollow body of the apron supporting portion 28 of the tension roller as clearly illustrated in Fig. 4.

When it is desired to change the wording of the sign that is to say change the month or day of the week appearing upon the apron 7, the key is placed in the aperture just above the slot 5 and the auxiliary gear is then rotated. The date formed upon the apron 8 may be changed by inserting the key in the socket just above the small opening 6.

From the foregoing description it will be obvious that an efficient device has been produced whereby the aprons will be held taut so as to be easily operated through the

medium of the keys which operate with the drive or operating rollers.

Having thus described the invention what is claimed is:—

A door sign of the class described comprising a casing, a plurality of horizontally extending flat bars engaging the upper and lower inner sides of said casing and being located at the front face thereof and spaced from the back of said casing, an apron-winding device carried by said bars, said device comprising guiding rollers journaled upon said bars, an apron-operating-roller-supporting-shaft and an apron-tension-roller-supporting-shaft journaled upon said bars between said guide rollers, an apron-operating-roller supported upon said apron-operating-roller-supporting-shaft, an apron-tension-roller carried by said apron-tension-roller-supporting-shaft, an apron passing over said guide rollers and being secured at one end to said apron-operating-roller and at the other end to said apron-tension-roller, said casing being provided on one side behind one of said flat bars with a cut-out portion contiguous to the apron-operating-roller-supporting-shaft, a primary gear secured to said apron-operating-roller-shaft contiguous to said cut-out portion, an auxiliary gear positioned in said cut-out portion and meshing with said primary gear, a plate extending across the cut-out portion holding the auxiliary gear in mesh with said primary gear, and key receiving means carried by said auxiliary gear.

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

EMORY McCLUNG.

Witnesses:

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