

Dec. 16, 1924.

R. H. BIGGS

1,519,480

PAPER TAPE MAGAZINE HOLDER

Original Filed April, 14, 1922 3 Sheets-Sheet 1

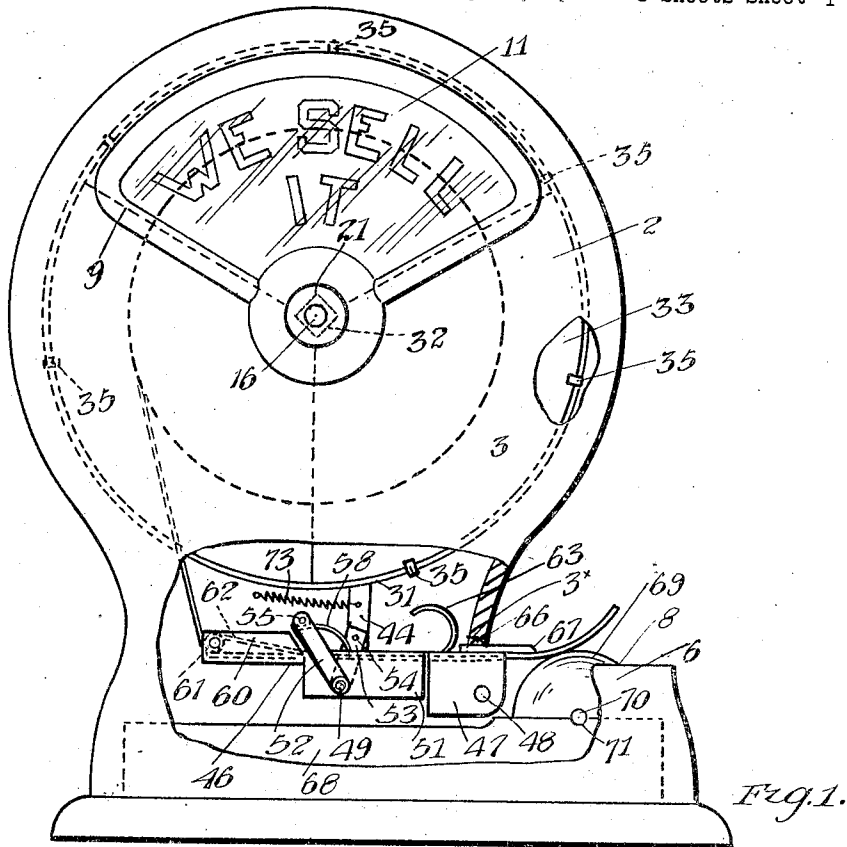


Fig. 1.

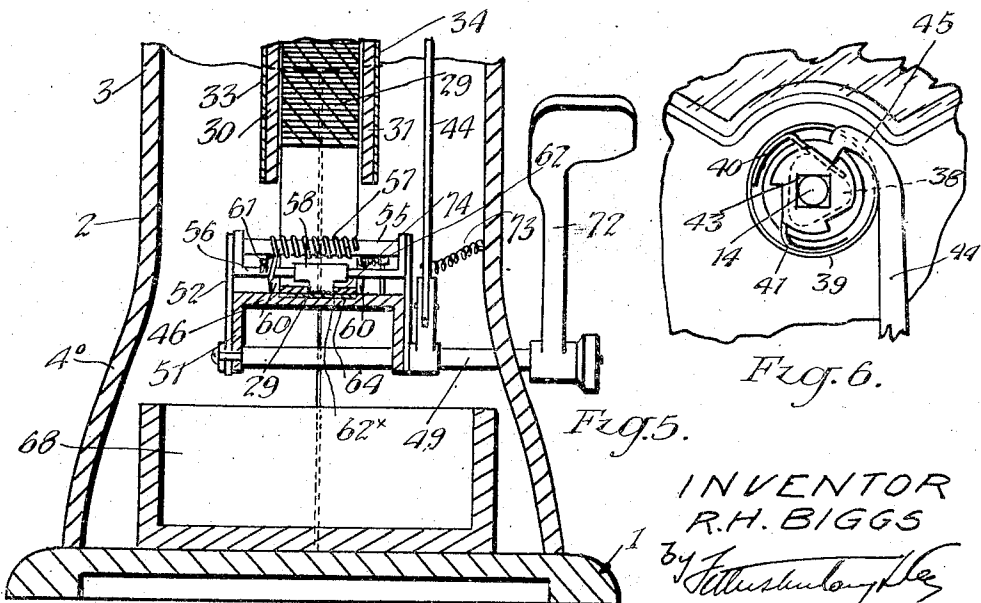


Fig. 5.

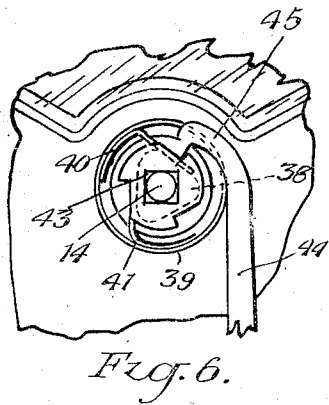


Fig. 6.

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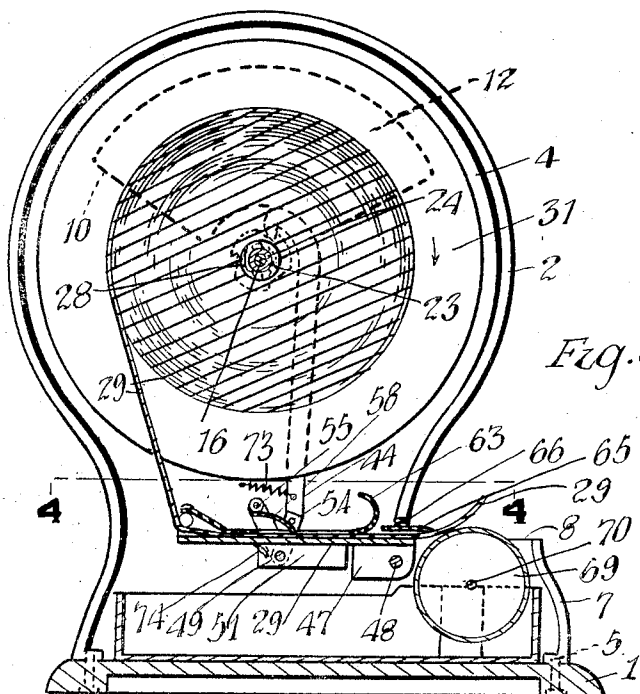


Fig. 2.

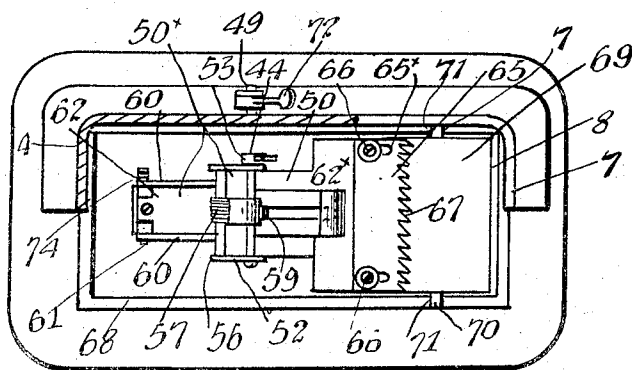


Fig. 4.

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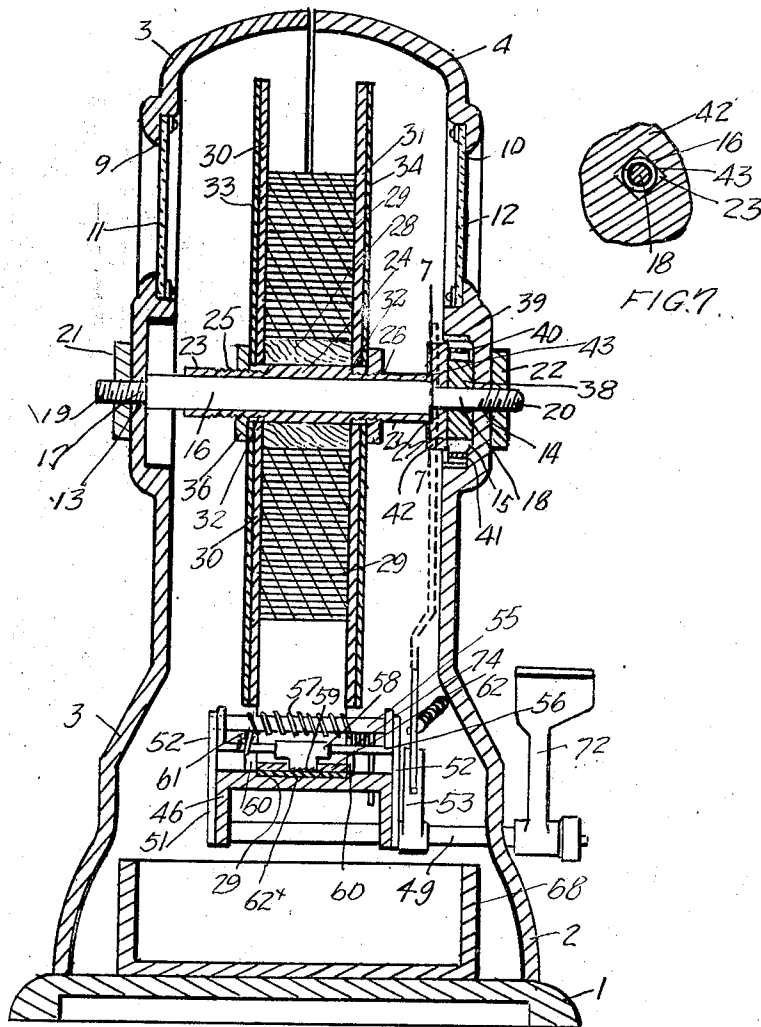


FIG. 3.

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Patented Dec. 16, 1924.

UNITED STATES PATENT OFFICE.

ROBERT HOWARD BIGGS, OF ST. CATHARINES, ONTARIO, CANADA.

PAPER-TAPE-MAGAZINE HOLDER.

Original application filed April 14, 1922, Serial No. 552,760. Divided and this application filed August 18, 1923. Serial No. 658,087.

To all whom it may concern:

Be it known that I, ROBERT HOWARD BIGGS, a subject of the King of Great Britain, and a resident of the city of St. Catharines, in the county of Lincoln, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Paper-Tape-Magazine Holders, of which the following is the specification.

My invention relates to improvements in paper tape magazine holders forming a divisional application of Serial No. 552,760, filed April 14th, 1922, and the object of the invention is to simplify the construction of a machine of the type disclosed in my Canadian Patent Number 213,305, dated September 13th, 1921 and the United States Patent Number 1,377,181, dated May 10th, 1921, so that it will be simple and cheap to manufacture and yet efficient, durable and easy to manipulate and it consists essentially of the arrangement and construction of parts as hereinafter more particularly explained.

Fig. 1 is a front elevation of my advertising device the casing of which is partially broken away to exhibit the operating mechanism therein.

Fig. 2 is a vertical sectional view taken on a plane parallel with the front and the back of the machine.

Fig. 3 is an enlarged cross sectional view taken through the centre of Fig. 2 at right angles thereto.

Fig. 4 is a plan view taken on line 4—4, Fig. 1 with the front portion of the casing removed.

Fig. 5 is an enlarged cross sectional view of the lower portion of the machine.

Fig. 6 is a detail view of the mechanism for operating the paper tape holder.

Fig. 7 is a sectional detail on line 7—7, Fig. 3.

In the drawings like letters of reference indicate corresponding parts in each figure.

1 indicates the base of the machine, 2 is the casing of the machine divided into two portions 3 and 4. The upper part of each portion 3 and 4 is circular in form and extends downward to form a contracted neck 3^a and is again flared outward as indicated at 4^a being secured to the base 1 by screws 5. One side of the neck portion of the casing terminates at 3^a. The walls forming the front and rear of the casing are extended laterally from this point as indicated at 6,

the lower portion of the casing corresponding to the portion 4^a connecting the ends of these parts together as indicated at 7.

By this construction a discharge opening 8 is formed. The upper part of each portion 3 and 4 of the casing 2 is provided with exhibiting orifices such as are indicated at 9 and 10 provided with glass closures 11 and 12. 13 and 14 are orifices formed in the centre of the circular part of the portions 3 and 4 of the casing. The wall of the portion 4 is provided with an interior recess 15 for a purpose which will hereinafter appear.

16 is a bolt extending between the front and rear walls of the casing being provided with reduced end portions 17 and 18 terminating in threaded portions 19 and 20 extending outward through the orifices 13 and 14 so as to protrude therefrom, 21 and 22 are nuts screwed onto the threaded portions 19 and 20 against the outer, front and rear faces of the casing so as to secure the portions 3 and 4 together. 23 is a sleeve mounted upon the bolt 16 and provided with an enlarged centre portion 24, squared portions located at each side of such enlarged portions and threaded portions 25 and 26 extending outward from the squared portions and an outer squared portion 27.

28 is a sleeve mounted freely upon the enlarged portion 24 so as to revolve freely therearound. 29 is a roll of paper tape mounted and secured to the sleeve 28. 30 and 31 are discs provided with squared centre orifices 32 fitting upon the squared portions 26 of the sleeve 23. 33 and 34 are advertising cards preferably sectoral in form secured to the outer face of each disc by means of suitable clips such as are indicated at 35. 36 and 37 are nuts screwed upon the threaded portions 25 and 26 against the outer face of the cards 33 and 34 so as to force the discs 30 and 31 inward against each end of the sleeve 28 to clamp thereto and form an integral unit therewith. 38 is a triangular member secured to the reduced portion 18 of the shaft 16 within the recess 15. 39 is an annular member having a driving fit within the recess 15. 40 and 41 are spring fingers secured to the annular member 39 and extending inward so as to bear against the two adjacent faces of the triangular member 38.

By this means the movement of the paper

tape holder is controlled. 42 is a ratchet gear mounted upon the reduced portion 18 of the shaft 16 and provided with a squared central recess 43 fitting the squared end of the portion 23 so that the paper tape holder rotates in unison with the ratchet wheel 42 when turning. 46 is a table secured to the front and rear walls of the casing, the right hand end extending below the lower end of the portion 3* of the casing and spaced apart therefrom so as to form a discharge opening. The right hand end of the table 46 is provided with depending lugs 47 through which a bolt 48 extends for supporting that portion of the table 46. 49 is a shaft turnably mounted in the wall of the portion 4 of the casing as clearly indicated in Fig. 3.

As will be seen from Fig. 4 the table 46 is reduced in width as indicated at 50 towards the centre of the machine and is further reduced at 50*. 51 are lugs depending from the reduced portion of the table and through which the shaft 49 extends. 52 are arms connected to the shaft 49 at each side of the table 46. The arms 52 extend upward in an inclined direction towards the centre of the machine. 53 is an arm rigidly secured to the shaft 49 and pivotally secured to the lower end of the bar 44 as indicated at 54 (see Fig. 2). 55 is a rod connecting the arms 52 together. 56 is a U-shaped member swung upon the rod 55 and depending slightly below the same. 57 is a spring wound around the rod 55 being connected at one end of the rod and at the opposite end bearing against the lower portion of the U-shaped member 56 tending to swing it towards the left hand side of the machine. 58 is a feed finger which is rigidly secured to the centre of the U-shaped member 56. The finger 58 is provided with a serrated or roughened end 59 for a purpose which will hereinafter appear. 60 is a flange which extends upward from each side of the table, 46. 61 is a rod extending between the flange 60 and turnable therein and slightly spaced above the top of the table so as to form an entrance slot for the paper tape as will hereafter be described.

62 is a spring pressure plate secured at one end to the rod 61 and provided with a longitudinal slot 62* through which the finger 58 extends. The right hand end of the spring plate 62 is turned upward as indicated at 63. The top of the table 46 is longitudinally recessed as indicated at 64 so as to form a passage way for the paper strip upon the upper face of which the spring pressure plate 62 bears. 65 is a severing knife which is secured to the left hand edge of the table as indicated by set screws 66 which extend through slots 65* formed in the knife. The cutting edge of the severing knife is provided with teeth

67 arcuate angular in form. The ratchet teeth 67 it will be seen in Fig. 4 incline forward for a purpose which will hereinafter appear.

68 is a water receptacle located within the base of the machine. 69 is a moistening roller supported upon a spindle 70 held in bearing notches 71 formed in the upper edge of the side walls of the water receptacle 68. 72 is a handle rigidly secured to the shaft 49. 73 is a tension spring connecting the lower end of the bar 44 to the casing so as to insure the return of the bar 44, arm 53, shaft 49, arms 52, rod 55 and finger 58 to their normal position. 74 is a spring wound upon the rod 61 and secured thereto and extending downward in an inclined direction beneath the shoulder formed by the reduced portion 50* of the table 46.

By this means the plate 62 is forced and held downward towards the table 46. The paper tape passes downward from the roll 29 beneath the rod 61 and passes between the table 46 and pressure plate 62 passing through the recessed portion 64 of the table 46 beneath the severing knife 65 and over the moistening roll 69.

When it is desired to operate the machine the handle 72 is pressed downward by one hand of the operator thereby swinging the arms 52 and arm 53 in the same direction simultaneously drawing the hooked end 45 of the arm into engagement with the teeth of the ratchet 42 so as to rotate the ratchet and consequently the sleeve 23 in the direction of the arrow (see Fig. 2) exerting a tension on the paper by means of frictional contact between the opposing faces of the discs 30 and 31 and the opposite faces of the paper roll 29.

Simultaneously with this operation the arms 52 are also swung in the direction of the arrow carrying the finger 58 forward with its serrated edge gripping the paper strip and thereby drawing the paper off the roll and passing it forward beneath the severing knife 65 and into contact with the periphery of the moistening roller 69.

As will be understood the under face of the paper strip is provided with adhesive substance which as it passes over the moistening roller is properly moistened ready for adhering to the article to which it is to be applied. When the paper is fed forward the fingers of the operator grip the free end of the paper and by a sideway movement used naturally when tearing off a piece of paper, the paper is carried into contact with the points of the teeth 67 which pierce the paper and gradually sever it at each individual point of puncture until a complete cut is made crosswise of the paper.

By this means the avoidance of all ragged edges is avoided when tearing off a portion of the paper tape. The spring fingers 40

and 41 bearing against the flattened faces of the ratchet 42 serve to hold the ratchet sleeve 23 and the discs 30 and 31 carried thereby in a definite stationary position after each
5 positive movement.

It will of course be understood that the outer face of each card disc 33 and 34 is provided with advertising matter which is brought successively opposite each exhibit-
10 ing orifice 9 and 10 at each operation.

From this description it will be seen that I have devised a paper tape magazine holder which is very simple in construction and therefore cheap to manufacture and yet will
15 be efficient, easily operated and positive in its action.

What I claim as my invention is:

1. In a paper tape magazine holder, the combination with a casing having a display
20 orifice in the front and back wall thereof, of a stationary support mounted in the casing, a pair of spaced apart separable discs each bearing a series of advertisements adapted to successively appear through the display
25 orifices and mounted upon said support to form an intervening paper tape roll containing space, a manually operated actuating lever, means located centrally of the

discs and coacting means operated by the lever for rotating the discs in unison, and means also adjacent the centre of the discs for positively controlling the length of each
30 movement.

2. In a paper tape magazine holder, the combination with a casing having a display orifice in the front and back wall thereof, of a stationary main support mounted in the casing, a pair of spaced apart discs each
35 bearing a series of advertisements adapted to successively appear through the display orifices and separably connected together and rotatable in unison round such support, a ratchet wheel connected to the discs and
40 having its centre in axial alignment with the centre of the discs, a flat sided member secured to the ratchet wheel, a spring finger adapted to engage successively the sides of
45 such flat sided member as such member and the ratchet to which it is connected is turned, a manually operated lever, and a hook member engaging the teeth of the ratchet and operable by the lever to move
50 longitudinally to impart a turning movement to the ratchet.

ROBERT HOWARD BIGGS.