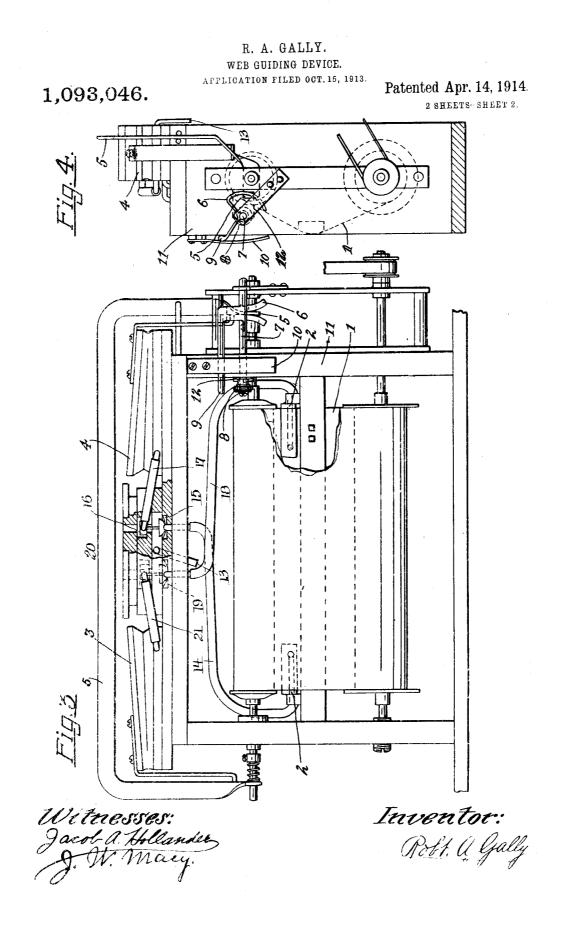


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UNITED STATES PATENT OFFICE.

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WEB-GUIDING DEVICE

1,093,046.

Specification of Letters Patent.

Patented Apr. 14, 1914. Application filed October 15, 1913. Serial No. 795,185.

10 all whom it may concern:

Be it known that I, ROBERT A. GALLY, a citizen of the United States, residing at Cincinnati, in the county of Hamilton, State 5 of Ohio, have invented certain new and useful Improvements in Web-Guiding Devices. of which the following is a specification.

Previous structures in this art have been

of either automatic or hand control, while '0 the present device combines the two styles, with means to alternately throw either the automatic or hand control into service at will. This improved double control is especially useful in the sheet guiding devices

15 of music players, as the automatic control will center a sheet, but if the perforations thereof are out of correct crosswise position on the sheet they will not operate, when by use of the hand control the perforations may

20 be brought to exact position. Also, a sheet having its edge too much damaged to correctly control the automatic device, can be operated by using the hand regulator, as also, in case of the automatic device getting 25 out of order.

In the drawings, Figure 1 is a front view of a music player roll box embodying the web guiding device of the present invention in condition for auto control; Fig. 3 is a 30 similar view of the manual control and engaging member in position for manual con-trol; Fig. 2 a right end view of Fig. 1. and Fig. 4 a right end view of Fig. 3.

The sheet or web 1 is automatically guided 35 to its normal travel line by any form of automatic guiding device governed from the sheet itself, either by the margin, surface. perforation or edge of said sheet. such devices being well known in the art, and here-

- 40 in shown in a general way by parts 2, 3, 4, and 5, an actuating part as 5 being adapted for optional engagement by a movable engaging member 6, which member 6 when thrown into engaged position with the ac-
- 45 tuating member 5 of the automatic control as shown in Figs. 3 and 4. locks against any shift of the sheet or web by the automatic control, and enables the crosswise shifting of position of the sheet or web by
- 50 the manual means as 7 and 8, with which said engaging member is combined. The manual control means here shown consists of a shaft 7 threaded at its end and having

similar manner as shown in my previous ap- 55 plication for roll adjuster, #719,310, filed Sept. 9, 1912, although any suitable form of manual adjuster may be used in combination with any suitable automatic control, and means for optionally throwing either 60 one into operative condition with the other out of use answer to the claims of this application.

With the use of shaft 7 to be moved longitudinally of itself for manually regulating 65 the web or sheet crosswise of its travel, the engaging member 6 is mounted on shaft 7 and has its outer part of a V-shaped fork form straddling over the actuating member 5 of the automatic control. The shaft 7 70 is revoluble on its axis by switch handle 9. so that when handle 9 is raised the fork part of engaging member 6 is thrown down toward actuating member 5 until the narrow part of the V of said fork closely en- 75 gages with member 5 so that the two travel together during the guiding control movement operated by the thumb-screw 8. When switch handle 9 is lowered the fork part of member 6 is raised so that its wider part 80 straddles member 5, allowing free operation of the automatic controlling devices. - A spring as 10 serves to hold the switch handle 9 in either of its set positions until changed by the hand of the operator. The 85 main part 11 in which shaft 7 is borne, holds against the pull of thumb-screw 8 when drawing the shaft 7 toward the screw, while a clip 12 holds against the opposite thrust. 90

In the automatic part of the guiding device herein shown for illustrating the present invention, an air suction 13 is provided to actuate the pneumatic device. The finger 2 at the left edge of the sheet 1 when moved 95 to the left by that edge of the sheet, admits air to the tube 14 and thus to pouch 15, actuating the valve 16 to connect the suction through tube 17 to the power pneumatic 4 and thereby move the actuating part 5, 100 the spindles, and the music sheet 1 to the right, and thus correct the error of travel of the sheet. The finger 2 at the right edge of sheet 1 when moved to the right by that edge of the sheet, admits air to the tube 18 105 and thus to pouch 19. actuating the valve 20 to connect the suction through tube 21 a thumb-screw 8 carried on said end in to the power pneumatic 3 and thereby move

the actuating part 5, the spindles, and the music sheet 1 to the left, and thereby correct the error of travel of the sheet.

Many modifications may be made, and yet be subject to what I claim as my invention:-----

Claims:

1. A traveling sheet or web, automatic means adapted to restore said sheet or web 10 to its normal travel line when it is deflected therefrom, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and means adapted to alternatively make ef-15 fective either said automatic means or said

manually controlled means.

 A traveling sheet or web, automatic means adapted to restore said sheet or web to its normal travel line when it is deflected
 therefrom, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and means adapted to alternatively make effective either said automatic means or said
 manually controlled means, and render said

other means ineffective.

3. A traveling sheet or web, automatic means adapted to control said sheet or web in its normal travel line, manually controlled 30 means adapted to determine the travel of said sheet or web in the desired travel line thereof, and means adapted to alternatively make effective either said automatic means or said manually controlled means.

4. A traveling sheet or web, automatic means adapted to control said sheet or web in its normal travel line, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line
40 thereof, and means adapted to alternatively make effective either said automatic means

or said manually controlled means, and render said other means ineffective.

5. A traveling sheet or web, automatic
45 means adapted to restore said sheet or web to its normal travel line when it is deflected therefrom and including an actuating member, manually controlled means adapted to determine the travel of said sheet or web in
50 the desired travel line thereof, and a movable engaging member adapted to engage said manually controlled means with said actuating member of the automatic means when said manual means is operative, and to 55 be disengaged from said actuating means of the automatic means of the automatic means is operative.

6. A traveling sheet or web, automatic means adapted to control said sheet or web 60 in its normal travel line, said automatic means including an actuating member thereof, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and a 65 movable engaging member adapted to en-

gage said manually controlled means with said actuating member of the automatic means when said manual means is operative, and to be disengaged from said actuating means of the automatic means when said automatic means is operative.

7. A traveling sheet or web, automatic means adapted to restore said sheet or web to its normal travel line when it is deflected therefrom and including an actuating mem-75 ber, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and a movable engaging member adapted to engage said manually controlled means with said 80 actuating member of the automatic means when said manual means is operative, and to be disengaged from said actuating means of the automatic means when said automatic means is operative, said manually controlled 85 means and engaging means adapted to resist the operation of said automatic means when said manual means is engaged as aforesaid.

8. A traveling sheet or web, automatic means adapted to control said sheet or web 90 in its normal travel line, said automatic means including an actuating member thereof, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and a mov- 95 able engaging member adapted to engage said manually controlled means with said actuating member of the automatic means when said manual means is operative, and to be disengaged from said actuating means 100 of the automatic means when said automatic means is operative, said manually controlled means and engaging means adapted to resist the operation of said automatic means when said manual means is engaged 105 as aforesaid.

9. A traveling sheet or web, automatic means adapted to restore said sheet or web to its normal travel line when it is deflected therefrom and including an actuating 110 member, manually controlled means adapt ed to determine the travel of said sheet or web in the desired travel line thereof, and a movable engaging member adapted to engage said manually controlled means with 115 said actuating member of the automatic means when said manual means is operative and to be disengaged from said actuating means of the automatic means when said automatic means is operative, said movable 120 engaging member being of V-shape straddling said actuating member.

10. A traveling sheet or web, automatic means adapted to control said sheet or web in its normal travel line, said automatic 125 means including an actuating member thereof, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and a movable engaging member adapted to en- 130 gage said manually controlled means with said actuating member of the automatic means when said manual means is operative and to be disengaged from said actuating
means of the automatic means when said automatic means is operative, said movable engaging member being of a V-shape straddling said actuating member.

14. A traveling sheet or web, automatic 10 means adapted to restore said sheet or web to its normal travel line when it is deflected therefrom and including an actuating member, manually controlled means adapted to determine the travel of said sheet or web in 15 the desired travel line thereof, and a movable engaging member adapted to engage said manually controlled means with said actuating member of the automatic means when said manual means is operative and 20 to be disengaged from said actuating means of the automatic means when said automatic means is operative, said movable engaging member being of V-shape straddling said actuating member, said actuating member 25 and said movable engaging member of Vshape having common motion in the same direction when engaged together and under the operation of the manually controlled means, said movable engaging member hav-

30 ing its engaging movement at an angle to that of said common motion.

12. A traveling sheet or web, automatic means adapted to restore said sheet or web to its normal travel line when it is deflect-

³⁵ ed therefrom and including an actuating member, manually controlled means adapted to determine the travel of said sheet or web in the desired travel line thereof, and a movable engaging member adapted to en-

40 gage said manually controlled means with said actuating member of the automatic means when said manual means is operative and to be disengaged from said actuating means of the automatic means when said

automatic means is operative, said movable 45 engaging member being of V-shape and straddling said actuating member, said actuating member and said movable engaging member of V-shape having common motion in the same direction when engaged together 50 and under the operation of the manually controlled means, said movable engaging member having its engaging movement in an arc having its plane at an angle to that of said common motion. 55

13. A traveling sheet or web, automatic means adapted to restore said sheet or web to its normal travel line when it is deflected therefrom and including an actuating member, manually controlled means adapted to 60 determine the travel of said sheet or web in the desired travel line thereof, and a movable engaging member adapted to engage said manually controlled means with said actuating member of the automatic means 65 when said manual means is operative and to be disengaged from said actuating means of the automatic means when said automatic means is operative, said movable engaging member being of V-shape and straddling 70 said actuating member, said actuating member and said movable engaging member of V-shape having common motion in the same direction when engaged together and under the operation of the manually controlled 75 means, said movable engaging member having its engaging movement in an arc having its plane at an angle to that of said common motion, a member of said manually controlled means adapted to be moved both 80 longitudinally and revolubly of its axis, said movable engaging member being supported on said last named member and movable in the two said directions therewith. ROBT. A. GALLY.

Witnesses:

S. M. WAMACKS, J. W. MACY.