W. R. CRIPPEN. TRACKER BAR FOR PNEUMATIC PLAYERS. APPLICATION FILED JUNE 14, 1911.

1,025,127.

Patented May 7, 1912.

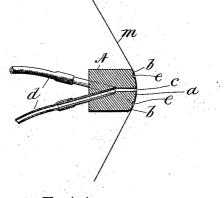


Fig-1-

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Fig.2.

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COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

## WALTER R. CRIPPEN, OF NEWTON, MASSACHUSETTS, ASSIGNOR TO VOSE & SONS PIANO COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MAINE.

## TRACKER-BAR FOR PNEUMATIC PLAYERS.

1,025,127.

Patented May 7, 1912.

Specification of Letters Patent. Pa Application filed June 14, 1911. Serial No. 633,144.

## To all whom it may concern:

Be it known that I, WALTER R. CRIPPEN, a citizen of the United States, and resident of Newton, in the county of Middlesex and 5 State of Massachusetts, have invented new and useful Improvements in Tracker-Bars for Pneumatic Players, of which the follow-

ing is a specification.
This invention relates to tracker bars for
10 pneumatic players, over which the perforated music sheet passes for controlling the pneumatic player action.

Hitherto, so far as I am aware, tracker bars have invariably been formed with a 15 smooth, slightly rounded and convex surface, through which open the row of perforations communicating with the player action. Two chief difficulties have been experienced with tracker bars of this form:

- 20 One is that if the paper music roll or sheet is at all wrinkled as it passes up over the bar, the smooth rounded surface has little effect on pulling out or smoothing the wrinkles, which on the contrary are often
- 25 emphasized when passing over the bar, thus preventing the paper sheet from properly cooperating with the tracker surface and the perforations of the bar; another difficulty is that lint from the moving paper sheet
- 30 tends to lodge in the air perforations of the bar, which furnish the only salient edges over which the paper passes.

The principal object of the present invention is to overcome these objections.

- 35 In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a cross sectional view of a tracker bar containing my invention; and Fig. 2 is a front view of a part of said bar.
- 40 A represents the body of the tracker bar, which is preferably made of a solid piece of metal, such as brass. The front face, or tracker face of the bar is provided with lengthwise extending ribs or beads forming 45 grooves or channels therebetween. These
- ribs as herein shown are three in number, the middle rib a projecting forward a little beyond the outer ribs b to insure a close engagement between it and the paper music
- 50 sheet m. Perforations c arranged in a row open through the crown of the middle rib aand communicate in the usual way by pipes dwith the pneumatic action (not shown).

The outer ribs b preferably present a sharper or narrower tracking edge or surface than 55 the middle rib a, which must be sufficiently broad on its crown to make proper contact with the perforated paper sheet, and prevent the admission of air into the holes cof the bar excepting through the perfora- 60 tions of the music sheet. As the paper sheet m passes over the face of the tracker bar in the direction of the arrow, it first meets the upper one of the ribs b, and the relatively narrow edges or surfaces of ribs b straighten 65 out any wrinkles which there may be in the paper before the paper passes over the middle rib and the air holes. The lint from the paper which might otherwise work into the air holes c, is caught in the groove e 70 between the outer and middle ribs, from which it may be easily dusted out. The lower rib b and the lower channel e which are on the side of the bar opposite to that over which the paper first passes, may be 75 dispensed with if desired as the chief office of the invention is to straighten out wrinkles in the paper sheet, and catch the dust or lint, before the paper passes over the air holes c. The lower bead and groove how- 80 ever perform a desirable, though not essential function, in smoothing out wrinkles, if any should escape the upper bead, before the paper is wound on the receiving spool.

Í claim:

1. In a pneumatic player employing a perforated music sheet, a tracker bar provided with at least one groove in its tracker face forming ribs at each side of said groove, both of said ribs adapted to engage 90 the music sheet and one of said ribs having a row of perforations opening through its crown.

2. In a pneumatic player employing a perforated music sheet, a tracker bar pro- 95 vided with at least one groove in its tracker face forming ribs at each side of said groove, the lower one of said ribs being relatively broader than the upper one and extending farther forward than the upper 100 one, both of said ribs adapted to engage the music sheet and one of said ribs having a row of perforations opening through its crown.

3. In a pneumatic player employing a 105 perforated music sheet, a tracker bar pro-

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vided with at least one groove in its tracker face forming ribs at each side of said groove, both of said ribs adapted to engage the music sheet and one of said ribs having

5 a row of perforations opening through its crown, said bar being formed of a solid piece of metal. Signed by me at Boston, Massachusetts, this 5th day of June, 1911.

WALTER R. CRIPPEN.

Witnesses: Robert Cushman, Charles D. Woodberry.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."