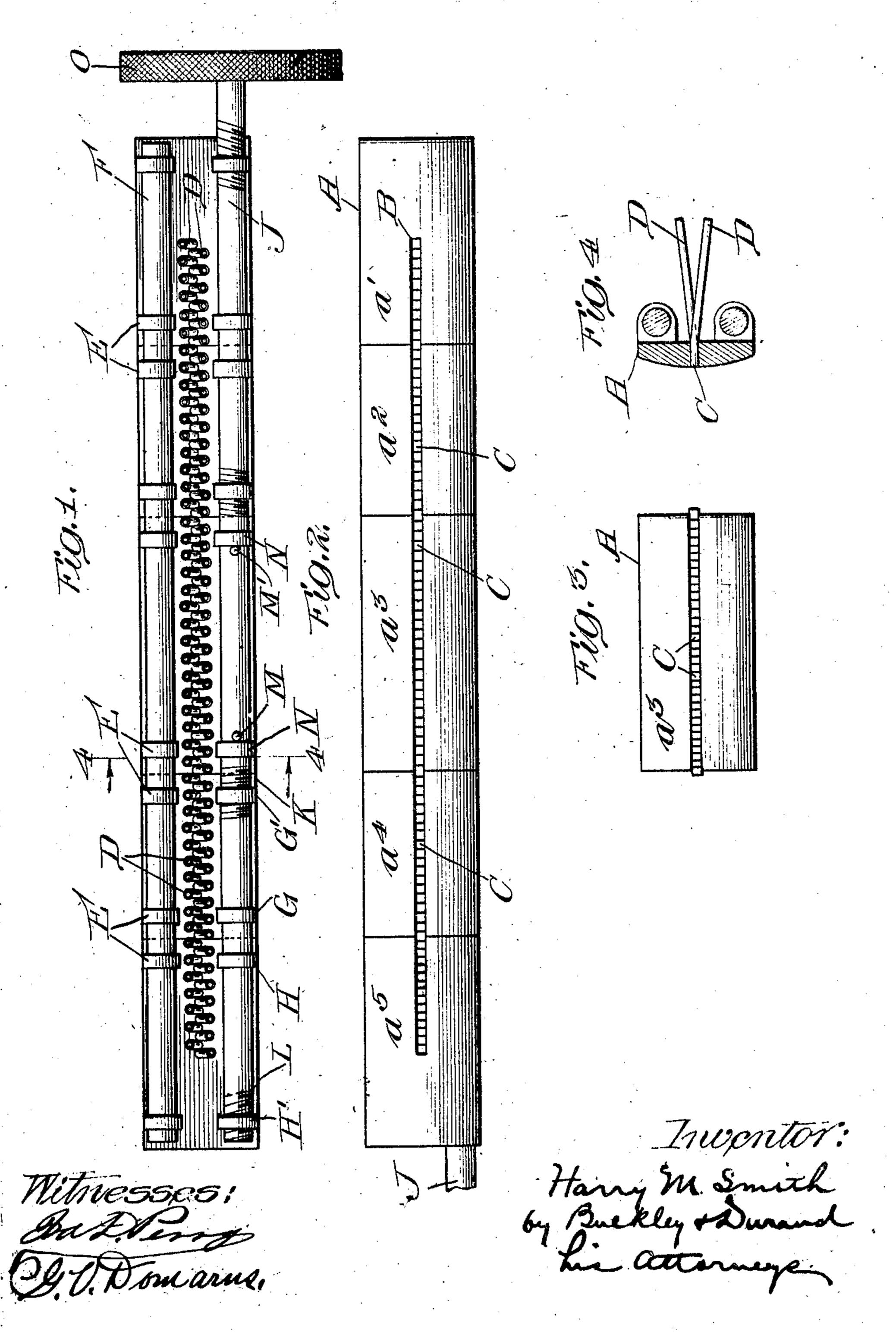
H. M. SMITH. SECTIONAL TRACKER BOARD APPLICATION FILED DEC. 8, 1905.



UNITED STATES PATENT OFFICE.

HARRY M. SMITH, OF CHICAGO, ILLINOIS, ASSIGNOR TO LYON & HEALY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

SECTIONAL TRACKER-BOARI

No. 862,289.

Specification of Letters Patent.

Patented Aug. 6, 1907.

Application filed December 6, 1905. Serial No. 290,525.

To all whom it may concern:

Be it known that I, Harry M. Smith, a citizen of the United States of America, and a resident of Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Sectional Tracker-Boards, of which the following is a specification.

My invention relates to improvements in tracker-boards for self-playing musical instruments, and has for its object the production of a tracker-board constructed in sections in order that the board may be made to accommodate itself to the varying widths of the music roll passing over said board.

A further object is the production of a tracker-board that may be cheaply constructed, and one that is least liable to warping or change incident to the weather. These and such other objects as may hereinafter appear are obtained by my device, an embodiment of which is illustrated in the accompanying drawings, in which

Figure 1 represents a bottom view of my improved tracker-board. Fig. 2 is a top view of the same. Fig. 3 is a view of a single section thereof. Fig. 4 is a sectional view on line 4—4 in Fig. 1, looking in the direction indicated by the arrow.

Like letters indicate like parts in the several figures 25 of the drawing.

Referring now to the foregoing drawings, A represents a tracker-board comprising a central section α^3 and side sections a', a^2 , a^4 and a^5 . B represents a long opening through the tracker-board adapted to receive the 30 squared ends C-C of the tubes D-D, which extend from the tracker-board to channels in the frame of the instrument in which the primary pneumatics are located. On the under side of the tracker-board are secured a series of collars E-E through which extends 35 a rod F, adapted to hold the individual sections together. The under side of the tracker-board is also provided with a second series of collars secured thereto, so arranged as that there shall be two collars secured to each section,—for instance, in section a4—one (G) 40 unthreaded and one (G') threaded. On the under side of section as are also two collars, one (H) unthreaded and one (II') threaded. These collars on the different sections are all in line, and adapted to have a rod J pass through the series of collars. This rod J is provided at 45 several points with threaded portions, such threaded portions K, L, being adapted to engage the threaded collars or nuts G' and H'. On that portion of the rod J located beneath the central section a³ are placed pins M and M' adapted to abut against collars N—N secured 50 to the central section. The purpose of these pins is to prevent any lateral movement of the rod with respect to the central section, and thus prevent any displace-

Be it known that I, Harry M. Smith, a citizen of the United States of America, and a resident of Chicago, and I is revolved.

ment of the section itself. Attached to one end of the rod J is a disk or thumb-piece O by means of which the rod J is revolved.

Referring to the operation of my device, the sections are fitted together, allowing between each section such slight distance as the season of the year or the temperature of the room may require. When through reason of hygrometric conditions, the music roll contracts or 60 expands, compensation may be made for such contraction or expansion by turning the rod J. Inasmuch is the sections are comparatively small, and the contraction and expansion are from the center, it is unnecessary to make any change in the position of the central 65 section, it being only necessary to shift the position of the side sections.

In order to properly compensate for the change in width of the roll, it is necessary to change the distance from the center to the extreme end of the tracker-board 70 in an increasing ratio of distance. This is accomplished by making the pitch of the threaded portion K of a less degree of inclination than that of the threaded portion L at the end of the rod. I find in practice that good results are obtained by making the pitch of the thread- 75 ed portions L, K, in the proportion of two to one.

In the use of articles of this description, in which a roll of music provided with openings arranged to register with the openings of the tracker-board is used, much difficulty is occasioned through the fact that 80 owing to conditions in the temperature and humidity, the shifting of the heles in the paper prevents a proper registration of such holes with the corresponding holes in the tracker-board. This, it is evident, will make the music faulty when produced under such conditions. 85

By the use of my improved device, I am enabled, after properly adjusting the position of the different sections of the tracker-board, to meet the existing conditions and to take care of any changes occasioned through variations in the width of the paper, with a 90 corresponding deviation in the proper location of the holes therein.

It is evident that my invention is capable of being altered to a considerable extent without departing from the spirit of my invention, especially with respect 95 to the methods of attaching the rods to the tracker-board, and also with respect to the threaded collars or nuts and screw-threaded portions of the rod. The essential feature of my invention is, however, a sectional tracker-board that is capable of being adjusted to meet 100 existing conditions.

It is evident that while I have only shown a trackerboard provided with five sections, any number of sections may be used with a corresponding change in the threaded collars or nuts and screw-threaded portions of the rod.

I claim:

tion of the tracker.

1. In an article of the class described, the combination 5 with a tracker board comprising an immovable central section, and a plurality of movable side sections, of means for varying the position of such side sections, said means comprising collars or nuts with threads of varying pitch, a rod having threaded portions corresponding therewith and 10 adapted to engage said nuts or collars, and stops to engage the collars on the central section of the central sec-

2. In an article of the class described, the combination

with a tracker-board comprising an immovable central horizontal section, of horizontal side sections adjacent to 15 each other, rods holding said sections together, a series of collars mounted on the tracker sections and supporting said rods, and means for varying the distance between adjacent sections, said means comprising screw-threaded portions on one of said rods, adapted to engage corresponding threads in said collars, the threads of said rods and collars being of different pitch for different sections.

Signed by me this 22nd day of Dec., 1905.

HARRY M. SMITH.

Witnesses:

F. H. DRURY,

S. C. Lewis.