Date of Application, 10th July, 1903—Accepted, 27th Aug., 1903

## COMPLETE SPECIFICATION.

## "Improvements in connection with Mechanical Musical Instruments."

I, FRIEDRICH ADOLF RICHTER, of Rudolstadt, Germany, Doctor of Philosophy, do hereby declare the nature of this invention and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement :-

The present invention relates to the class of star wheel dampers for mechanical musical instruments described in my Letters Patent No. 14941 of 1902, in which a wire damper is attached to the face of the wheel, one being provided for each arm or tooth of the wheel, the end of each damper resting loosely against the side of the wheel. These wire dampers are liable to injury in 10 some cases, for instance if the teeth of the note disc become bent or deformed, and the object of the present invention is to mount the wire damper. in such manner that the same is protected against injury in any case. In order to attain this object the wire dampers are mounted on a special damper holder disc, which is located between two faces, the peripheries of which form the 15 actual star wheel for striking the tongues of the combs.

In order to render the present specification easily intelligible reference is had to the accompanying drawing in which similar letters of reference denote similar parts throughout the several views.

Fig. 1. is a side elevation of the complete wheel,

Fig. 2 is a similar elevation with the front face removed and, Fig. 3 is an elevation of the damper holder disc with some of the damper

wires in position on the same the front and rear faces being removed.

The starwheel proper is composed of two discs e having teeth g for engaging with the teeth of the comb, one disc e being mounted at each side of the 25 damper holder disc c (Fig. 3) and secured to the same by means of rivets f or in any other suitable manner. The damper holder disc c is provided with recesses b and the damper wires are secured to the same as indicated at d. These wires extend beyond the periphery of the teeth of the disc c and have their free ends bent round so as to lie in the recesses b as will be clearly seen 30 in Fig. 3. The two discs e coincide exactly with each other and the holder disc, c is secured between the same, so that the rounded part a of each damper wire extends outside beyond the discs at one side of each of the teeth as shown

By this means the free end of each damper wire is snugly protected in the 35 recess b and guarded at each side by the face discs e so that the dampers cannot be injured in any way even by defective teeth of the note disc as only the rounded shoulder of the same extends beyond the surfaces of the star wheels.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that 40 what I claim is:-

1. In a mechanical musical instrument the employment of a star wheel damper in which the damper wires are mounted on a special damper holder disc secured between the two face discs forming the star wheel substantially in the manner and for the purpose hereinbefore described.

[Price 8d.]

20



## Improvements in connection with Mechanical Musical Instruments.

- 2. A star wheel damper for use with mechanical musical instruments in which the damper wires are mounted substantially in the manner hereinbefore described
- 3. The improved star wheel damper for use with mechanical musical instruments arranged combined and operating substantially as hereinbefore described 5 and illustrated in the accompanying drawing.

Dated the 10th day of July 1903.

G. F. REDFERN & Co., 4, South Street, Finsbury, London, Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.-1903.

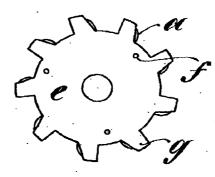


Fig. 2

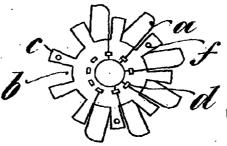
e

d

d

d

Fig.3



PREE LIBRARIES