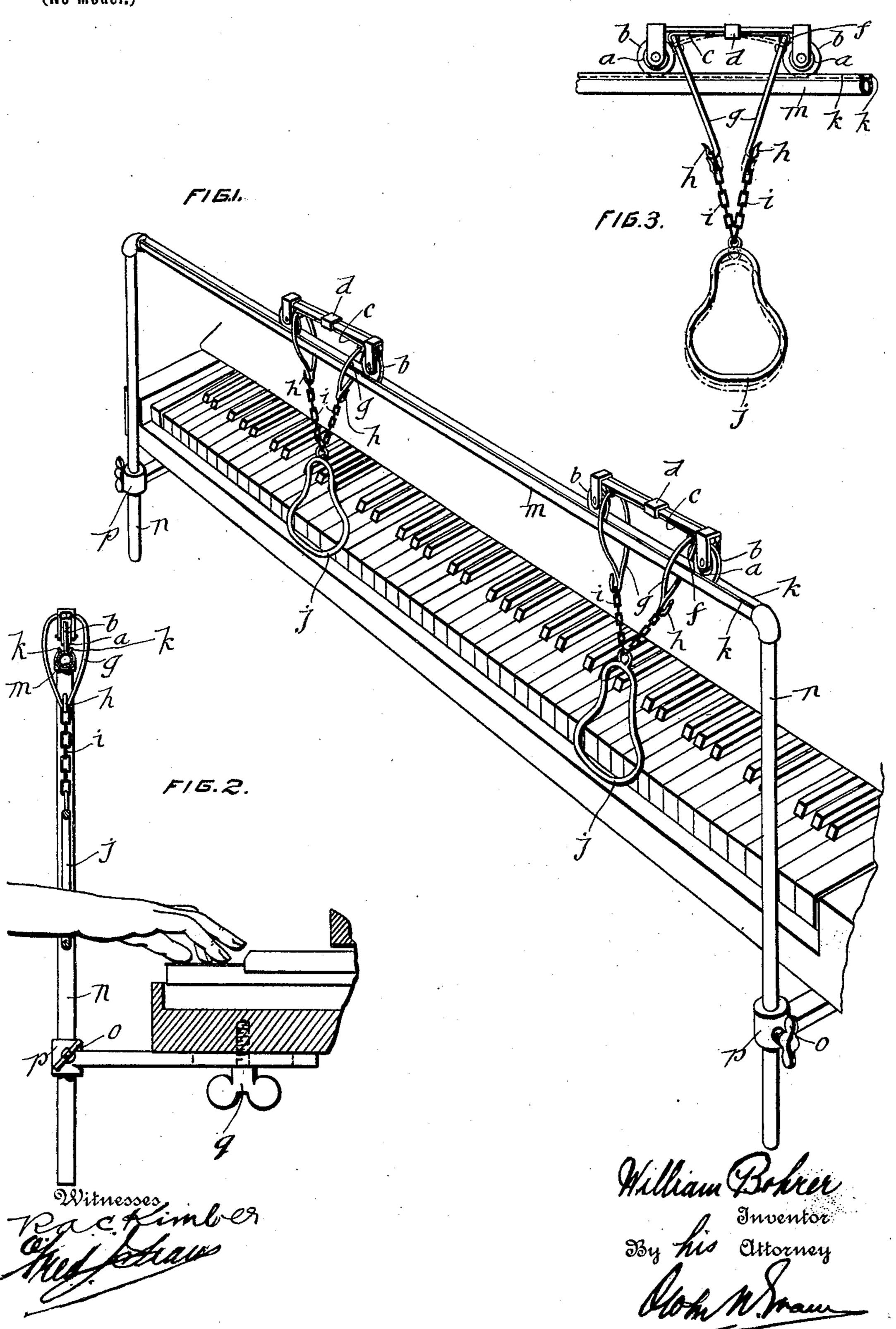
## W. BOHRER. HAND GUIDE FOR PIANOS.

(Application filed Jan. 19, 1901.)

(No Model.)



## United States Patent Office.

## WILLIAM BOHRER, OF MONTREAL, CANADA.

## HAND-GUIDE FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 679,288, dated July 30, 1901.

Application filed January 19, 1901. Serial No. 43,960. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM BOHRER, of the city of Montreal, in the district of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Hand-Guides for Pianos; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates particularly to hando guides for use in the instruction of a pupil to
maintain a proper elevation of the hands rela-

tively to the keyboard.

The invention has for its prime object to provide a hand-guide for pianos which will automatically raise or lower the level of the pupil's hand when he moves it from the white to the black keys, or vice versa, a further object of the invention being to provide a guide that will move more easily with the pupil's hands and be more susceptible to and tend to prevent the hand assuming an incorrect position, as by lowering the wrists, a fault all beginners are subject to.

To this end the invention may be said, briefly, to consist of a pair of wrist guides hung from a pair of carriages supported upon a rod, and the connections between the guides and carriages being adapted when depressed to a certain extent to make a frictional contact with and arrest the movement of the car-

riages.

The invention may be said, furthermore, to consist in the various combinations and arrangements of parts hereinafter described,

35 and pointed out in the claims.

For full comprehension, however, of my invention reference must be had to the accompanying drawings, forming a part of this specification, in which similar reference characters indicate the same parts, and wherein—

Figure 1 is a perspective view of a portion of a piano with a pair of hand-guides constructed according to my invention applied thereto, and Fig. 2 is a transverse vertical sectional view thereof. Fig. 3 is a front view of the carriage and a portion of the guide-rod.

My invention comprises a guide-rod adjustably supported above the keyboard and a pair of carriages running along said guide-rod. Each of my improved carriages is mounted upon a pair of wheels a, preferably provided with rubber tires b, and a bow-spring c is se-

cured at its middle, preferably by a strap d, to the under side of the carriage, and is of sufficient length to have its ends project over the 55 wheels a. The ends of this bow-spring are bent back, as at f, to inclose and support a pair of loops g, having hooks h formed in one therewith, which suspend two short lengths i of chain connected at their lower ends to a wrist-60 ring j.

The wheels of my improved carriages run between a pair of flanges k, formed integral with a tubular rod m, constituting the guide-rod and supported at its ends upon standards n, 65 passing downwardly through and adjustably secured by thumb-screws o in a pair of brackets p, which are in turn adjustably secured by thumb-screws q to the under side of the forwardly-projecting portion of the piano-frame. 70

In use the guide-rod m is first adjusted to the proper height and to a position relatively to the front of the keyboard most desirable for the correct position of the pupil's hands, which are passed through the wrist-rings, his 75 wrists resting lightly without pressing upon the rings. The rolling carriage offers a minimum resistance to the movement of the hands up and down the keyboard, while the fact of the wrist-rings swinging on a center above 80 and in front of the keyboard will insure an upward swinging of the rings corresponding with the upward and forward movement of the hands from the surface of the white to the surface of the black keys. The rubber tires 85 b facilitate a brake action of the bow-spring c, the function whereof is when the pupil's wrists are lowered from the proper position to transmit the resulting undue pressure from the wrist-rings to the bow-springs, thereby bend- 90 ing the latter and causing their ends to bear upon the tires and prevent the carriages moving with the ease necessary.

What I claim is as follows:

1. A hand-guide for pianos, comprising a 95 supporting-rod, a pair of carriages adapted to travel along such rod, a pair of wrist-guides and connections between each of said carriages and a wrist-guide, such connections adapted when depressed to a certain extent 100 to make a frictional contact with and arrest the movement of the carriages, as and for the purpose set forth.

2. The combination with a pair of carriages

traveling above and longitudinally of the keyboard of a piano, and means for supporting said carriages, of a pair of wrist-guides, and means, including a part for arresting the 5 movement of the carriage, for suspending one of said wrist-guides from each of said carriages, substantially as described and for the purpose set forth.

3. The combination with a pair of carriages traveling above and longitudinally of the keyboard of a piano, and means for supporting said carriages, of a pair of wrist-guides, devices for automatically arresting the movement of said carriages, and means for suspending said wrist-guides from the arresting devices, substantially as described and for the

purpose set forth.

4. The combination of a pair of carriages each mounted upon a pair of wheels located one at each end thereof and running upon a guide-rod above and extending longitudinally of the keyboard of a piano; means for supporting said rod; a bow-spring secured at its middle to each of said carriages and having its ends extending over the wheels thereof, a pair of wrist-guides and means for suspending one of said wrist-guides from the ends of each of said bow-springs, substantially as described and for the purpose set forth.

5. The combination of a pair of carriages each mounted upon a pair of wheels located at each end thereof; a guide-rod supporting said carriages and above and extending longitudinally of the keyboard of a piano; means for supporting said guide-rod; rubber tires upon said wheels, a bow-spring secured at its middle to each of said carriages and having its ends extending over the wheels thereof, a pair of wrist-guides and means for suspending one of said wrist-guides from the ends of the bow-spring of each carriage, substantially as described and for the purpose set forth.

6. A hand-guide attachment for pianos comprising a flanged tubular rod, means for supporting said rod in front of and above the keyboard; a pair of carriages; a pair of wheels located one at each end of each of said carriages and running between the flanges upon said rod; rubber tires for said wheels; a bow-spring secured at its middle to each of said carriages and having its ends extending over the wheels thereof; a pair of wrist-rings; two pairs of

loops encircling said flanged rod and connected at their upper ends to the ends of the bow-spring of each carriage, a series of chains 55 each connected at one end to one of said loops and at its other end to one of said wristrings, substantially as described and for the

purpose set forth.

7. A hand-guide attachment for pianos 60 comprising a flanged tubular rod, means for supporting said rod in front of and above the keyboard; means for adjusting said rod toward and from said keyboard; a pair of carriages; a pair of wheels located one at each 65 end of each of said carriages and running between the flanges upon said rod; rubber tires for said wheels; a bow-spring secured at its middle to the under side of each of said carriages and having its ends extending 70 over the wheels thereof; a pair of wrist-rings; two pairs of loops encircling said flanged rod and connected at their upper ends to the ends of said bow-springs; a series of chains each connected at one end to one of said loops and 75 at its other end to one of said wrist-rings, substantially as described and for the purpose set forth.

8. A hand-guide attachment for pianos comprising a flanged tubular rod, means for 85 supporting said rod in front of and above the keyboard; means for adjusting said rod toward and from said keyboard; means for vertically adjusting said rod; a pair of carriages; a pair of wheels upon and located one 85 at each end of each of said carriages and running between the flanges upon said rod; rubber tires for said wheels; a bow-spring secured at its middle to the under side of each of said carriages and having its ends extend- 90 ing over the wheels thereof; a pair of wristrings; two pairs of loops encircling said flanged rod and connected at their upper ends to the ends of said bow-springs; a series of chains each connected at one end to one 95 of said loops and at its other end to one of said wrist-rings, substantially as described and for the purpose set forth.

In testimony whereof I have affixed my signature in presence of two witnesses.

WILLIAM BOHRER.

Witnesses:

FRED J. SEARS, ARTHUR H. EVANS.