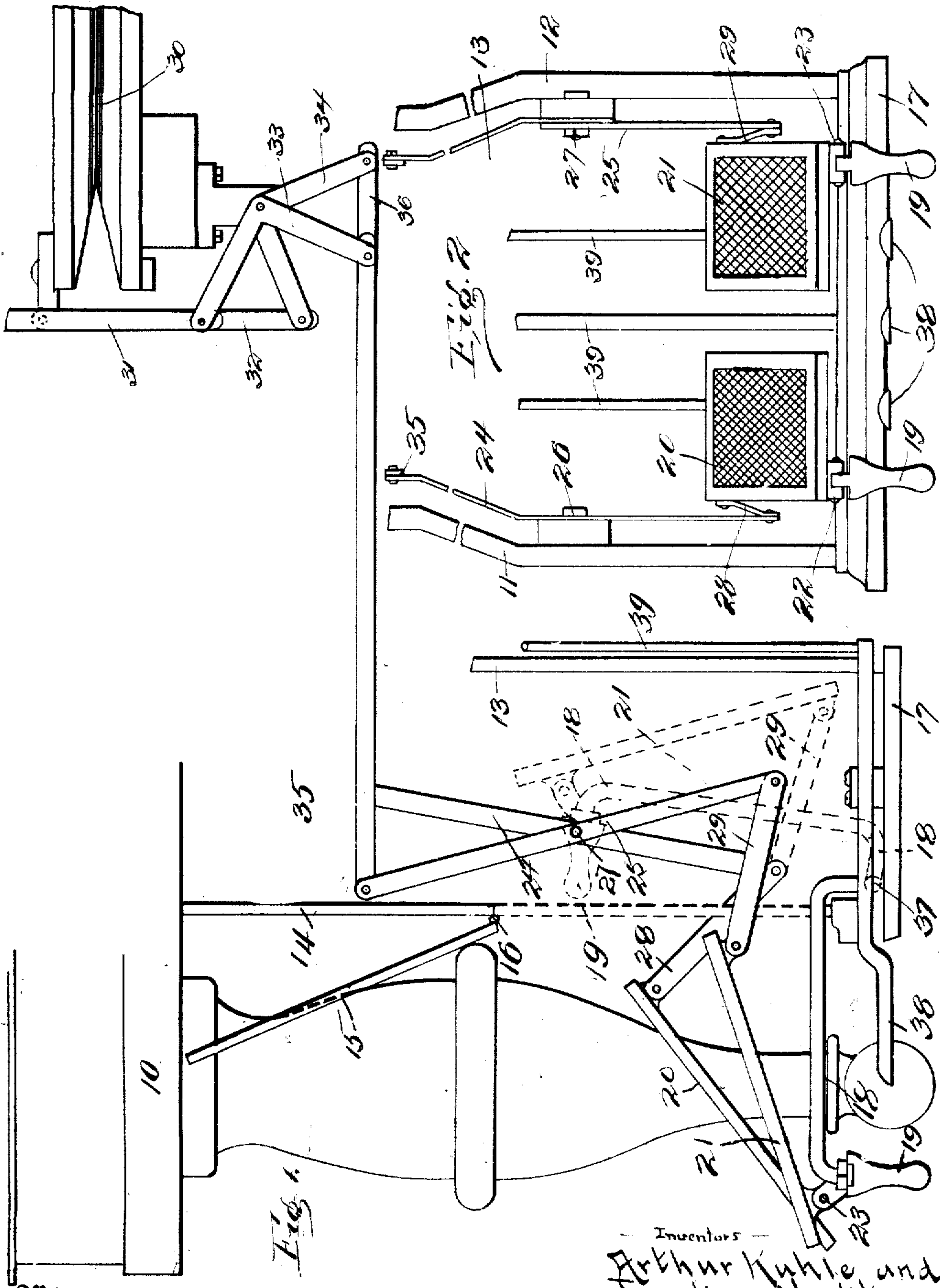


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# UNITED STATES PATENT OFFICE.

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PLAYER-GRAND PEDAL-ACTION.

936,998.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JUSTUS HATTEMER and ARTHUR KUHLE, citizens of the United States, residing at West New York, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Player-Grand Pedal-Actions; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to pedal actions for player grand pianos, and has for an object to provide a pedal mechanism adapted to be mounted within a lyre disposed beneath a grand piano in substantially the usual manner.

A further object of the invention is to provide an improved form of lyre adapted to contain pedals when folded and to present, when closed, the usual pedals found in the lyre of a grand piano.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the drawings:—Figure 1 is a view of the pedal mechanism in side elevation with the side of the lyre removed, showing the pedal shown in full lines and folded within the lyre in dotted lines. Fig. 2 is a view of the lyre in front elevation with the closure opened and also showing the pedals in front elevation opened.

Like characters of reference designate corresponding parts throughout the several views.

The body of a grand piano is shown conventionally at 10 depending beneath which are the side walls 11 and 12 of the lyre being formed in any approved manner, and with the rear side closed by a back 13, and the front closed by a front 14 having a lower section or door 15, hinged at 16. Upon the base 17 a frame 18 is hinged having feet 19 carried rigidly therewith adapted to rest

upon the floor when the frame 18 is in opened position, as shown in full lines in Fig. 1. Upon the frame 18 pedals 20 and 21 are pivoted as by the hinges 22 and 23, respectively. Within the lyre box levers 24 and 25 are respectively pivoted, as at 26 and 27, and also respectively connected by means of links 28 and 29 with the pedals 20 and 21.

At any approved or convenient position within the piano body, bellows 30 are mounted, preferably in pairs, and from such bellows links 31 and 32 depend downwardly through the bottom of the body and are, respectively, connected with bell crank levers 33 and 34. The bell crank levers 33 and 34 are, respectively, connected by means of links 35 and 36 with the levers 24 and 25.

It will be seen from Fig. 1 that the frame 18 and the pedals 20 and 21 pivoted thereon are capable of being folded upon the hinge 37 within the lyre box to the position shown in dotted lines, and that when so closed the cover 15 may be closed downwardly upon its hinge to close the front of such lyre box, leaving only the pedals 38 extending outwardly therefrom connected with the usual pedal rods 39.

It will be apparent that with the lyre box given a fanciful design, it will be scarcely noticeable from the lyres ordinarily employed beneath grand pianos and upon which the ordinary pedals are fulcrumed, as shown in the present application.

The addition of the player piano pedals foldable within the lyre box are intended to accompany proper mechanism mounted upon a grand piano to convert such grand piano into a player grand or into a manually-operated piano as occasion or the operator may demand.

What we claim is:—

1. The combination with a piano, of a box, pedals hinged upon the box, levers mounted within the box and pivotally connected with the pedals, bellows positioned to actuate pneumatic mechanism, levers mounted to operate the bellows, and links



connecting the first-mentioned levers with the second-mentioned levers.

2. The combination with a piano, of a pedal box mounted beneath the piano, of levers  
5 pivotally mounted within the box and normally approximately vertical, and pedals adapted to operate the levers and foldable between the levers.

In testimony whereof we affix our signatures in presence of two witnesses.

JUSTUS HATTEMER.  
ARTHUR KUHLE.

Witnesses:

E. A. SCHMITT,  
JOHN E. CAPLEAS.