Important General Directions.

THE SMALL HANDLE in the centre of the name board of the Clavier controls the WEIGHT OF TOUCH. By turning the handle to the right the weight of touch is increased. The sliding gauge at the left of the handle registers by ounces the amount of the key resitance. Light Piano Touch, (2 ounces) is obtained when the pointer is at or below the first line. Medium Piano Touch (3 ounces) is obtained when the pointer is at the second line. Heavy Piano Touch (4 ounces) is obtained when the pointer is at the third line. Very Heavy Piano Touch (5 ounces) is obtained when the pointer is at the fourth line. Beyond this point the touch is heavier than the touch of any piano, and should be used only for special practice and with care and judgment, for the acquirement of strength, endurance and delicacy.

THE KNOB at the right hand end of the key-board controls the DOWN-CLICKS.

THE KNOB at the left hand end of the key-board controls the UP-CLICKS.

To bring on the CLICKS, clasp the fingers over the edge of the case, and with the thumbs press the STOPS From You. To put *off* the clicks, place the *thumbs* on the edge of the *key-block*, and with the fingers draw the STOPS Toward You. When it is desirable to employ easy, dropping movements of the fingers, and still bring the *clicks*, the stop must be pressed From You, until it strikes the screw which enters the end of the case from the outside through the escutcheon. When it is desirable to employ force of finger stroke, press the stop over as before, then draw it back toward you a little; and increased finger effort will then be required to produce the clicks.

It is injurious both to fingers and instrument to force the clicks beyond a reasonable accent stroke.

To Regulate the Clicks.

THE REGULATION OF THE CLICKS IS A VERY SIMPLE MATTER.

The escutcheon-screw in the right hand end of the case, regulates the down clicks; the one at the other end regulates the up-clicks.

DIRECTIONS.—When the Down-Click Stop is pressed back against the escutcheon screw, if easy dropping finger movements do not bring the clicks, turn the escutcheon-screw (with a screw-driver); give it at first about a quarter turn out, then press the stop over again and test the clicks; if still they do not come easily enough again turn the escutcheon screw out, and so continue until the clicks come as easily as is desired. *Observe, However, that the escutcheon-screw must not be turned so far out as that the stop when pressed over does not come against it.*

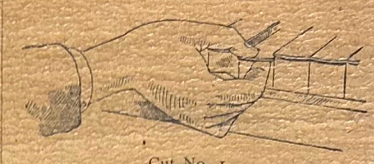
IF EVER THE DOWN-CLICK of a Key should be found to come easier than the down-click of the other keys, remove the key* and with the screw-driver turn the screw in the front end of the key a very little farther in; replace the key, and if by trial the click is found to come by a stroke equal to that required by other keys, it is right, if not, the screw must be adjusted until it is right. Or if to bring a click it is found that greater force must be given than is necessary to bring the click from other keys, turn the screw out a very little; then test the click by comparison with other keys as before.

IF EVER THE UP-CLICK of a Key does not sound, it is not because any part has failed, but for one of the following reasons, namely: Either some foreign substance is lodged on the felt or brass rail under the key, or something is caught between the keys. *A down-click may be silenced in the same way.* To correct this simply remove the key and displace whatever is found under or between the keys.*

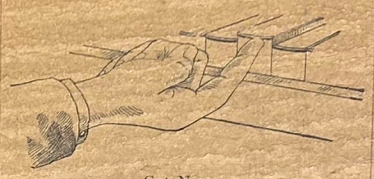
To Remove a Key,

take out the *name-board* by removing the four *screws* by which it is made fast to the *end blocks*; unhook the large *wire*, extending from the *back* of the *case* to the *name-board*. This *wire-hook* is held in place by the little *coil spring* under it, which must first be *unhooked*. Lift the *name-board* a little, and draw it toward you, and the large *metal-screw* and *spring-rail* will come out with it. The *little spring rail* covered with cloth, which crosses the keys can be taken off by unscrewing the *three nuts* on the top of the *rail* and lifting it from its supporting props. This done, the keys can be removed.

CAUTION.—*Do not get the keys mixed*, each key fits its own place, and will not work properly in any other.



Cut No. 1.



Cut No. 2.



Cut No. 3.

DARKNESS, causes the wood to swell and the keys to bind on the balance-pins, or the guide-pins, or both, so closely that they do not act freely, will silence the Up-Clicks. This is frequently the case when the instrument is new, or if it is not much used. To correct the difficulty, first take hold of the key by the projecting ivory; bear it down about an eighth of an inch, *see cut* 1;—move the key from side to side and see if it has a slight free play, if so, it is right, but if not, if it seems to be held quite firmly, it is *too tight* on the guide pin, and must be eased. To do this, remove the key and with a pair of pliers, turn the guide pin a very little To THE RIGHT. (*Observe that the guide-pins are not round, and that by a slight turn to the right they fill the mortise in the key less closely and thus give the freedom required.*) Again test the play of the key as before; as soon as it is found to have a slight side movement it is properly free at the guide-pin.

Now see if the Up-Clicks sound properly, if not, lift the end of the key about an eighth of an inch,—*see cut* No. 2;—draw the finger under the projecting ivory and let the key fall; if it drops quickly and freely with a slight thud as it strikes the cushion underneath, it is all right, but if the key remains up, (after the finger leaves it,) or if it moves down slowly, it is too tight on the balance-pin and must be eased. To do this, remove the key, and with a small round file, file the wood away a *very little*, touching the hole on the sides, *not on the front or back of the hole*. Cut No. 3 represents the file touching the hole at the proper point. Great care must be taken not to file *too much*, make not more than too strokes of the file, out and in, (*bearing very lightly upon it.*) Give the file not more than a half inch motion; then place the key in position and see if it will drop; if not, touch it again with the file on the opposite side of the hole. As soon as the key drops freely, it is right. Again try the Up-Click; if still it does not sound properly, the screw in the key must be turned forward until it does sound. *When an up-click sounds properly, there is no flutter and yet the click is loud enough to be distinctly audible.*

Important.

When turning an up-click screw always put the down-clicks off, then press the key down in front, and hold it there firmly while turning the screw.

The screws for the up-clicks will be seen in the keys under the long rail that slides back and forth to change the weight of touch. To adjust the upper screws *do not* remove the keys; but to adjust the down-click screws the keys must be removed.

If the Up-Clicks Clatter

it is because the stop goes over *too far*. To correct this, turn the escutcheon-screw in until the clicks sound clearly and distinctly.

If Some of the Up-Clicks Clatter

and others do not; turn the screw in the key or keys that clatter *backward* until the *clattering ceases*, or if some clicks do not sound, or are *too* weak, and yet by trial, (as shown in cuts 1 and 2, the keys act freely, turn the screw in the key or keys that are wrong, *forward* until they *click properly*.

When Through Practice

THE GAUGE SHOULD BE TURNED BACK, and the instrument closed as a protection against dirt and dampness.

To Pack the Instrument,

prepare it for the box as you found it when received by you. See that the cleats inside the box are securely fastened and that no screws can come against the instrument. Place the instrument in the box, replace the cloth-covered wood strips at the side and end and across the front of the instrument and screw them fast. Fasten securely the cover of the box and the instrument can be shipped with safety.

SPECIAL DIRECTIONS.

To ensure the proper action of the KEYS of the CLAVIER, and the sure sounding of the CLICKS, see that the instrument stands steadily, ALL FOUR LEGS TOUCHING THE FLOOR, and that it is not exposed to a DAMP ATMOSPHERE, as any SPRINGING of the BOTTOM OF THE CASE, or SWELLING of the KEYS, will prevent their free action and thus silence the Clicks. OBSERVE THE ABOVE, and the CLAVIER will doubtless ALWAYS be found in WORKING ORDER.