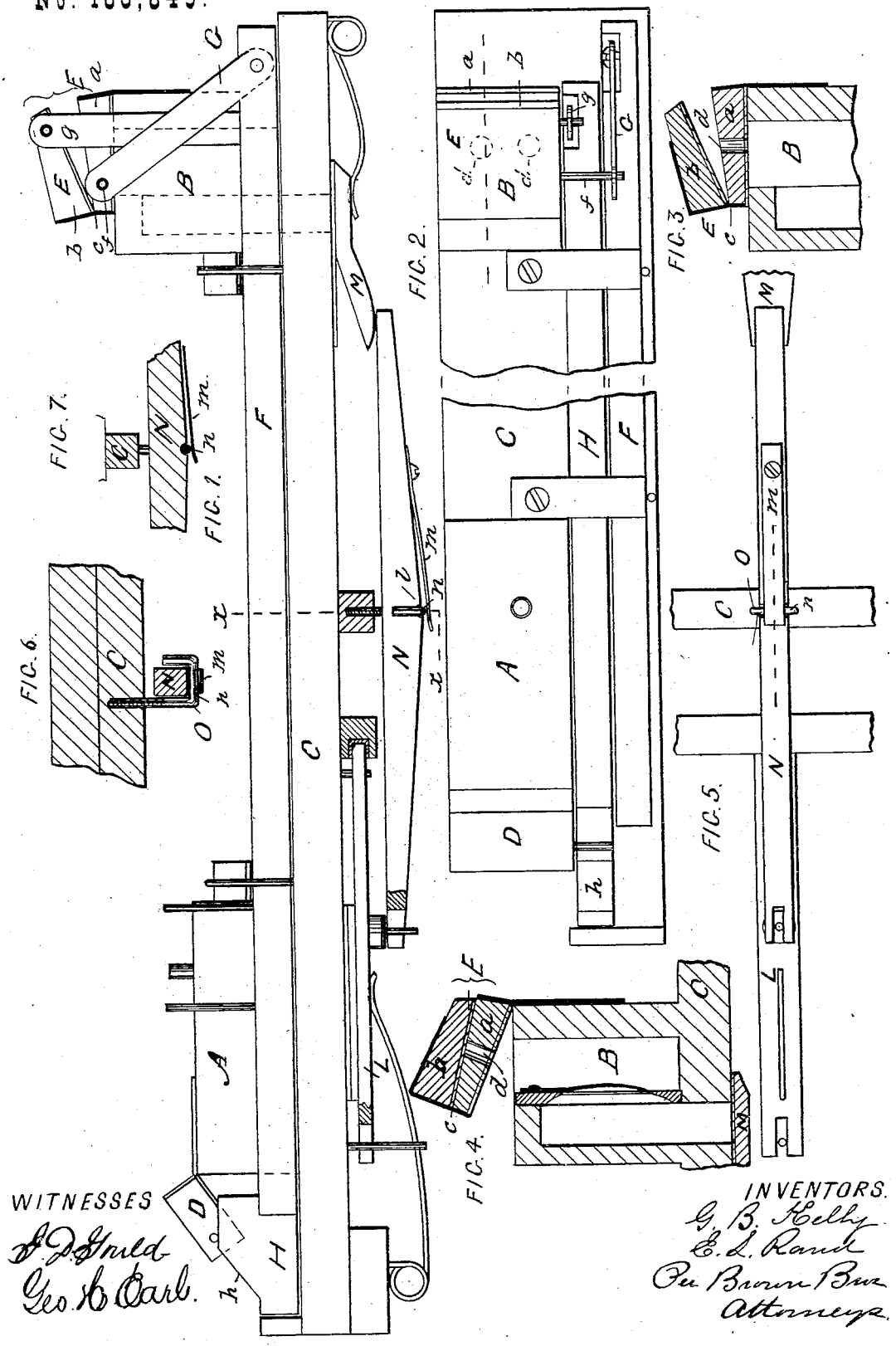
G. B. KELLY & E. L. RAND.

REED-ORGAN.

No. 186,849. Patented Jan. 30, 1877.



WITNESSES

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GEORGE B. KELLY AND EDWARD L. RAND, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN REED-ORGANS.

Specification forming part of Letters Patent No. **186,849**, dated January 30, 1877; application filed September 6, 1876.

To all whom it may concern:

Be it known that we, GEORGE B. KELLY and EDWARD L. RAND, both of Boston, in the county of Suffolk, in the State of Massachusetts, have invented an Improvement in Reed-Organs, of which the following is a specification:

This invention consists in the construction of the register for a set of reeds in parts or sections, which are hinged as a whole, as ordinarily, to the reed-block, to open and close the usual air-passages to the reeds of said block.

The improvements will be fully hereinafter described, and a preliminary explanation is not therefore deemed essential.

In the accompanying plate of drawings, Figure 1 is a side elevation. Fig. 2 is a plan view of Fig. 1; Figs. 3 and 4, transverse sections of a reed-block having our improved divided register; Fig. 5, a plan view of the lever-coupler for the pallets of different sets of reeds; Fig. 6, a detail vertical section on line *x x*, Fig. 1; and Fig. 7, a detail sectional view of reed-lever coupler.

In the drawings, A and B represent two reed-blocks, attached to a common reed-board, C, and each provided with a set of reeds and air-passages to the reeds, all as ordinarily; D, the register to the reeds of reed-block A, and E the register to the reeds of reed-block B. Both registers D and E are hinged to their respective reed-blocks, as ordinarily.

The register E is in two parts or sections, *a* and *b*, which are hinged together at one edge, as at *c*, to be opened from and closed upon each other, and by the part *a*, hinged to the reed-block, as stated. *d*, openings through thickness of parts *a* to register E, which openings are in line with the usual air-passages to the reeds of said register E, one to each passage, but are all of a smaller size or capacity than the usual air-passages to the reeds; F, a stop-slide connected, through pivoted arm G and pin *f*, to part *a* of register E; and H, a stop-slide connected, through pivoted arm *g*, to part B of register E. This stop-slide H works by its incline *h* on the register D of reed-block A, and when moved forward and backward opens and closes at the same time the register D and the part *b* of register E. The register E as a whole—that is, part *a* inclusive—is opened and closed by the movement of the stop-slide F. The register D, in addition to the stop-slide H, has a stop-slide to work it by itself only, as usual.

With the two sets of reeds represented by the two reed-blocks A and B and registers D and E turned in unison, obviously, with the register D and the divided register E opened as a whole, the full tones of the two sets of reeds can be obtained, and with the register D open, and the divided register E, as a whole, closed, but opened in its parts *a* and *b*, by opening the part *b* from the part *a*, thus opening the reeds of the divided register to the smaller air-passages *d*, the tones will be softened, producing what is known as the "celeste." L, a pallet of a reed to the set of reeds represented by the register D and the reed-block A, and M a pallet of a reed to the set of reeds represented by the register E and the reed block B. These two pallets are arranged, as ordinarily, to be opened and closed; and in order that the opening and closing of the one, L, will open and close the other, M, I couple them together by a lever, N, which at one end bears on one pallet, L, and at the other end bears on the pallet M, and midway its length turns on a fulcrum-bearing, *l*, which is in the form of a staple, O, screwed into the under side of the board C, which carries the reed-blocks A and B. *m*, a bent spring fastened to the coupling-lever N, so as to bear at its free end on one side of the fulcrum-arm *n* to staple O, (see Figs. 1, 6, and 7,) and thereby confine the lever, which is on the other side of said arm *n* to its bearing *l* thereon.

The lever N, arranged as above described, couples together the pallets L and M, and secures their joint operation, and by turning the staple in and out of the board the lever N will be regulated in its pressure on the said pallets.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with the reed-block of a reed-organ, of a register hinged to the said block, and constructed in two parts, *a b*, hinged

together at one edge, and the former part, *a*, having openings *d*, substantially as and for the purpose described.

2. The combination, with the board C, having the adjustable bearing *l*, and with the pallets L M of the reeds, of the horizontal lever N, centrally pivoted on said bearing *l*, and resting at its ends on the pallets, substantially as and for the purpose described.

3. The coupling-lever N, fulcrum *l*, and bent spring *m*, in the combination herein shown and described, for the purpose specified.

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Witnesses:
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