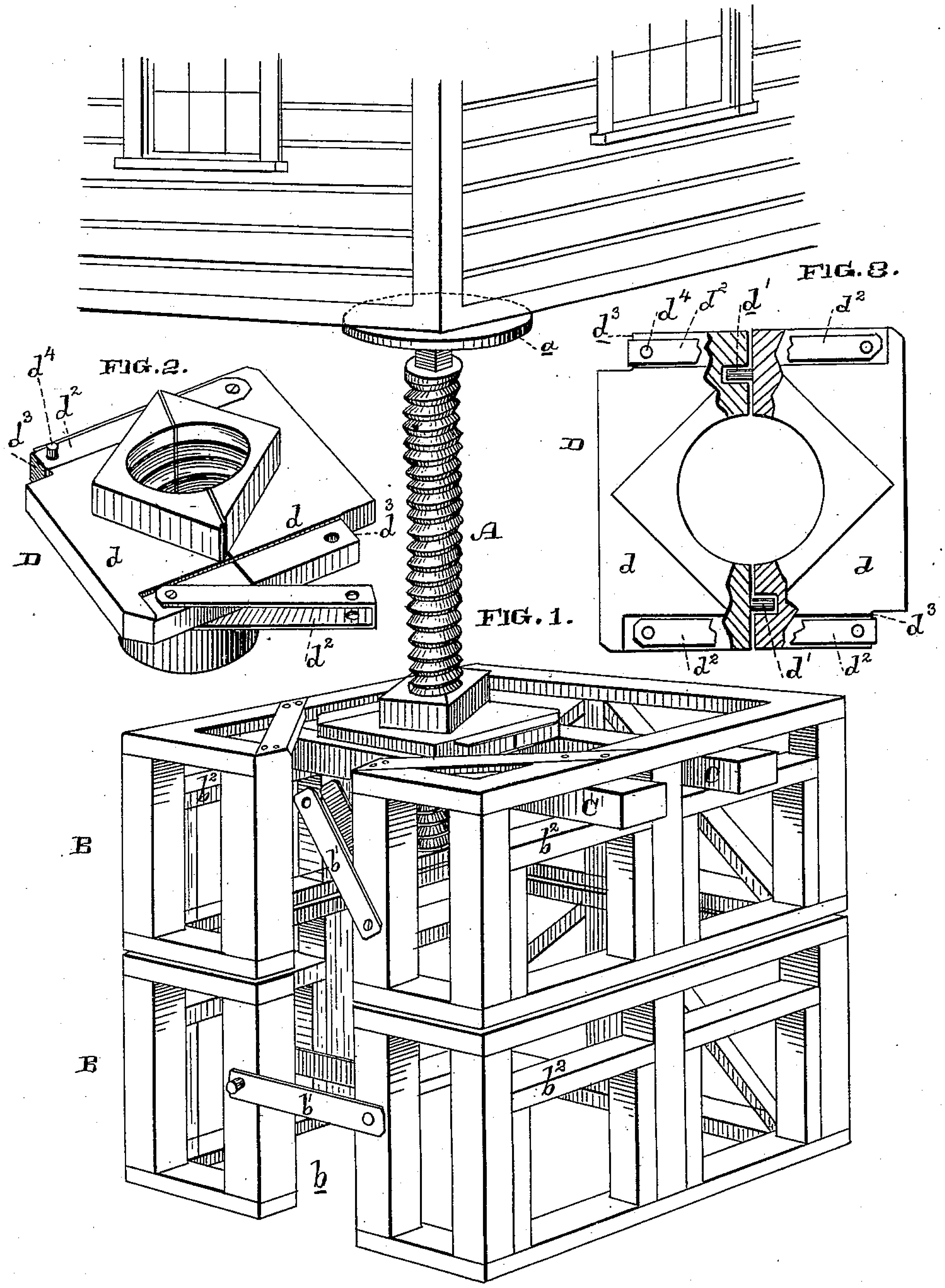
(No Model.) 2 Sheets—Sheet 1.

T. F. MAHER.

HOUSE RAISING APPARATUS.

No. 332,811. Patented Dec. 22, 1885.



Witnesses,
Geo. H. Strong.
J. H. Nourse

Inventor,
Thos. F. Maher
By Dewey & Co.
Attorneys

N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

T. F. MAHER.

HOUSE RAISING APPARATUS.

No. 332,811. Patented Dec. 22, 1885.

FIG. 4.

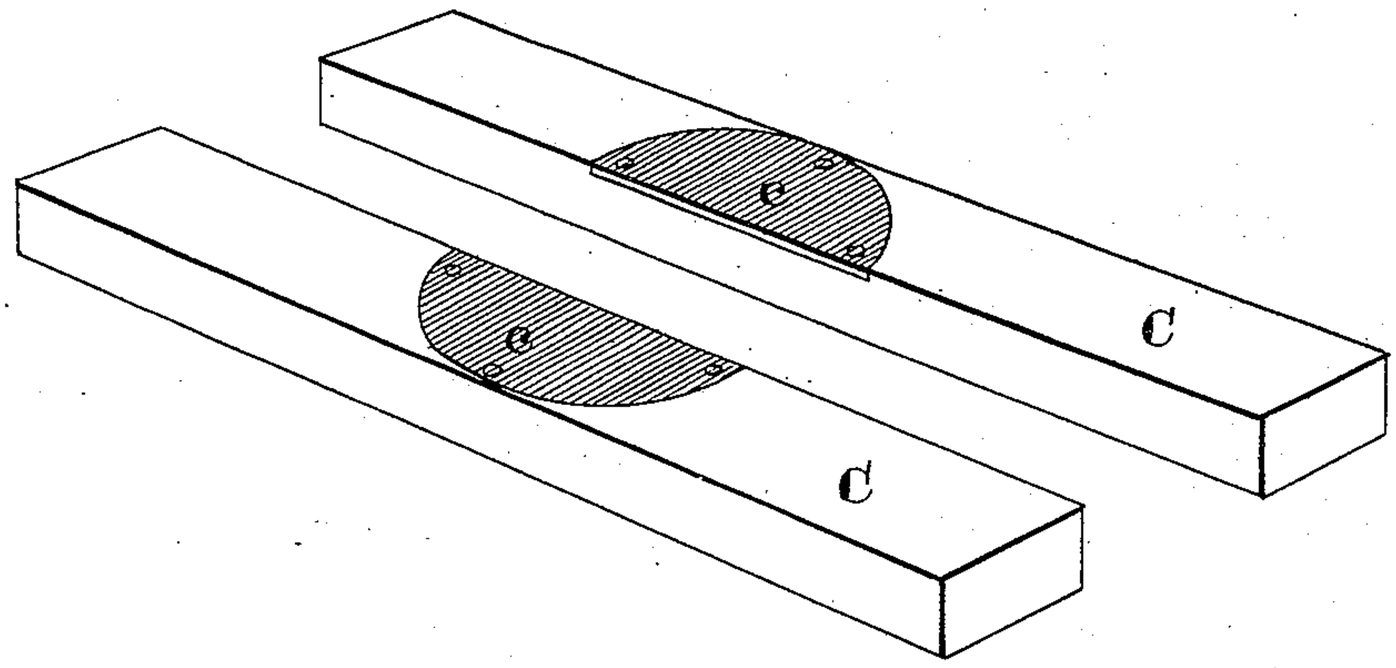
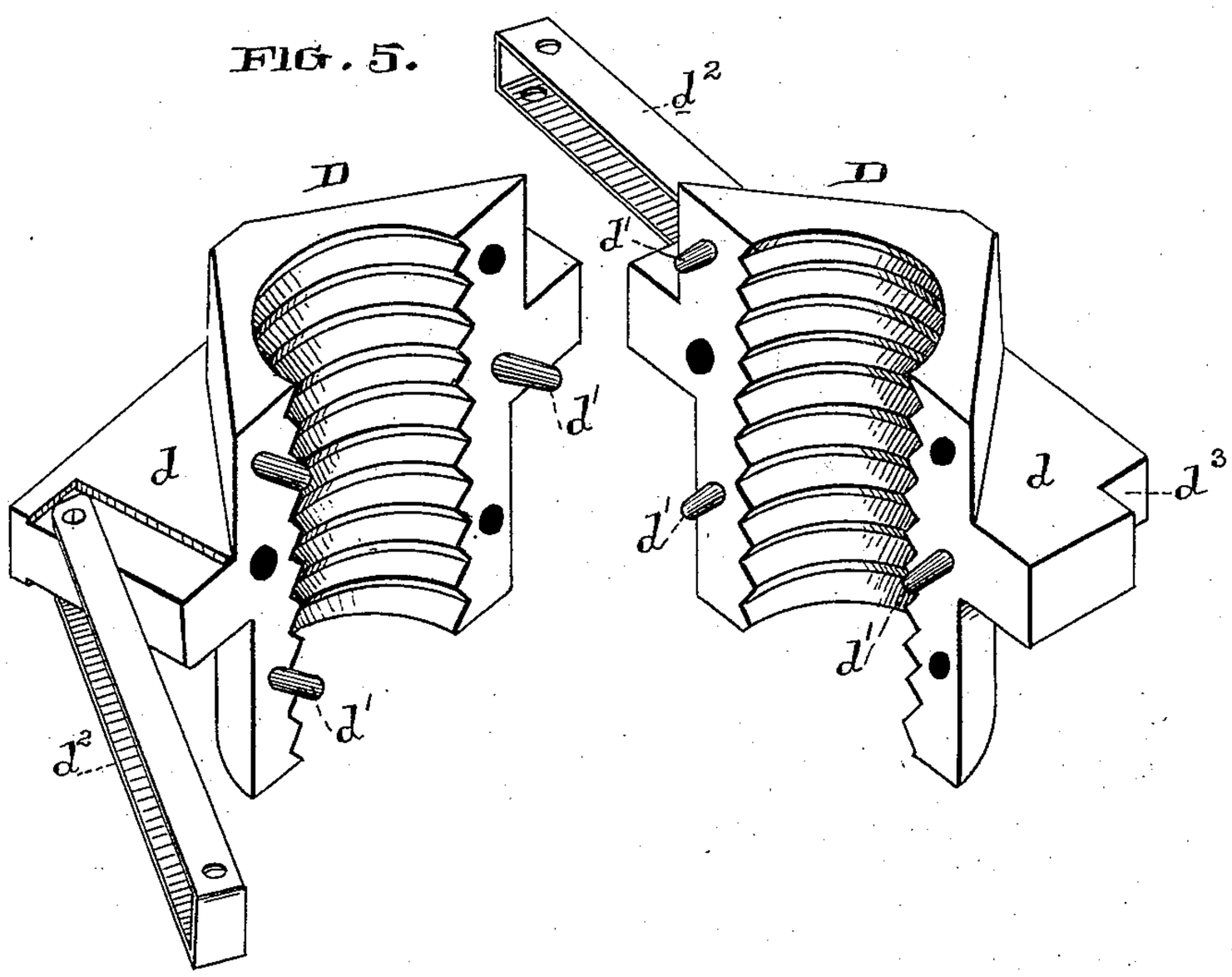


FIG. 5.



Witnesses,
Geo. H. Strong.
J. A. Howard.

Inventor,
Thos. F. Maher
By
Dewey & Co.
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS F. MAHER, OF SAN FRANCISCO, CALIFORNIA.

HOUSE-RAISING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 332,811, dated December 22, 1885.

Application filed October 27, 1885. Serial No. 181,107. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. MAHER, of the city and county of San Francisco, and State of California, have invented an Improvement in House Raising Apparatus; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to the class of house-raising apparatus; and it consists in peculiarly-constructed adjustable frames and nuts, adapted to be fitted to their places and the work continued without having to remove the lifting-screw during the whole operation.

The object of my invention is to provide means for completing the full operation of raising or lowering a house without having to remove the lifting-screws.

Referring to the accompanying drawings, Figure 1 is a perspective view of my house-raising apparatus. Fig. 2 is a perspective view of the nut D. Fig. 3 is a plan of same, a portion being broken away to show the dowel-pins. Fig. 4 is a view of the removable strips. Fig. 5 is a perspective view showing the parts of the nut separated.

A is the screw, of suitable dimensions, provided on its top with the usual bearing-plate, *a*, upon which the weight rests.

B is a frame, made of about the usual size, but differing from the ordinary frames in two particulars—namely, an opening, *b*, in one end or side guarded by swinging strips *b'*, and the ledges b^2 in its sides. The opening is to permit the frame to be fitted to place around the screw, and the ledges are to receive and support the removable and adjustable cross-pieces C. These pieces are provided with iron bearing-plates *c* at their centers, Fig. 4.

D is a nut having a central flange, *d*, above which the body of the nut is square to receive a wrench, and below it is cylindrical. The nut is a two-part one, being divided into two equal parts, readily separable, and fitted together by dowel-pins *d'* and secured by swinging bails or clamps d^2. These clamps are pivoted to the flange of the nut, one on each part, and each is adapted to fit over and to be removed from a shoulder, d^3, on the opposite part of the nut. When in place, the clamps are seated in rabbets on the flange, so as to be out of the way, and are secured by pins d^4 passing through them and the intervening flange.

The operation is as follows: One frame being first put in place, and the screw supported by means of one of the nuts resting through its flange on the bearing-plates of the cross-pieces of the frame, and tightened down by a wrench against said pieces, the said screw is then turned by a wrench engaging its top, squared at b^3, until it is elevated to its limit, carrying the weight up with it. Now, without removing the screw, a second frame is taken and fitted around the screw, this being possible because of its opening *b*. It rests on the first frame. The guard-strips *b'* are then adjusted, and the cross-pieces C put in place. A second nut is then taken, its parts separated, and fitted around the screw at a point above the cross-pieces C of the second frame. The parts of the nut when fitted on the screw are secured by their clamps, and the nut is then tightened down against the cross-pieces C. The screw is again turned, so that in rising it passes up out of the first nut, and the weight is then borne entirely by the second nut. When the limit of the screw is a second time reached, a third frame is fitted on the second around the screw, and the cross-pieces of the first frame being now free may be used for the third, and the first nut being also free may be fitted on the screw above the third frame, and so on to the end of the operation. It will thus be seen that the screw need not be removed during the entire operation, but with two such nuts as I have described two sets of cross-pieces for the frames and as many frames as will equal the height to be attained the screw can remain in place and raise the weight as high as desired.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In house-raising apparatus, the combination of a screw on which the weight rests, separable or divided nuts adapted to be fitted over the screw at any portion, and frames adapted to be fitted around the screw and to form bearings for the nuts, substantially as described.

2. In house-raising apparatus, the combination of a screw on which the weight rests, separable or divided nuts adapted to be fitted over the screw at any portion, frames adapted to be fitted around the screw, and removable cross-pieces supported by the frames and forming bearings for the nuts, substantially as described.

3. In house-raising apparatus, the combination of a screw on which the weight rests, separable or divided nuts having flanges and adapted to be fitted over the screw at any portion, frames adapted to be fitted around the screw, and removable cross-pieces supported by the frames and forming bearings for the flanges of the nuts, substantially as described.

4. In house-raising apparatus, the screw-elevating nut D, having a flange, *d*, and consisting of two independent parts, and the pivoted bails or clamps d^2 for holding the parts together, substantially as described.

5. In house-raising apparatus, the screw-elevating flanged nut D, consisting of two independent parts united by dowel-pins *d'*, and the pivoted bails or clamps d^2 for holding the parts together, substantially as described.

6. In house-raising apparatus, the frame B, having an opening, *b*, in one side or end by which it can be fitted around the lifting-screw while the latter is in place, substantially as described.

7. In house-raising apparatus, the frame B, having an opening, *b*, in one side or end by which it can be fitted around the lifting-screw, and ledges b^2, in combination with the removable cross-pieces C, supported on the ledges, substantially as described.

8. In house-raising apparatus, the screw supporting the weight, and separable or divided nuts to be fitted on said screw, in combination with frames B, having an opening, *b*, on one side or end by which they can be fitted around the screw, and ledges b^2 in their sides, and the removable cross-pieces C, supported on the ledges and supporting the flanged nuts, substantially as described.

9. In house-raising apparatus, the screw supporting the weight, and frames constructed to fit around the screw while in place, in combination with the flanged nuts D, consisting of two independent parts united by dowel-pins and held together by pivoted clamps d^2, said nuts being fitted on the screw while in place and bearing on the frames, substantially as described.

10. In house-raising apparatus, the combination of the screw A, supporting the weight, the frames B, having openings *b*, and removable cross-pieces C, having bearings *c*, and the two-part separable flanged nuts D, fitting on the screw and bearing on the cross-pieces, substantially as described.

In witness whereof I have hereunto set my hand.

THOMAS F. MAHER.

Witnesses:
S. H. NOURSE,
H. C. LEE.