J. Van Gaasbeek.

Raising Buildings.

No. 63,583. Patented Apr. 2, 1867.

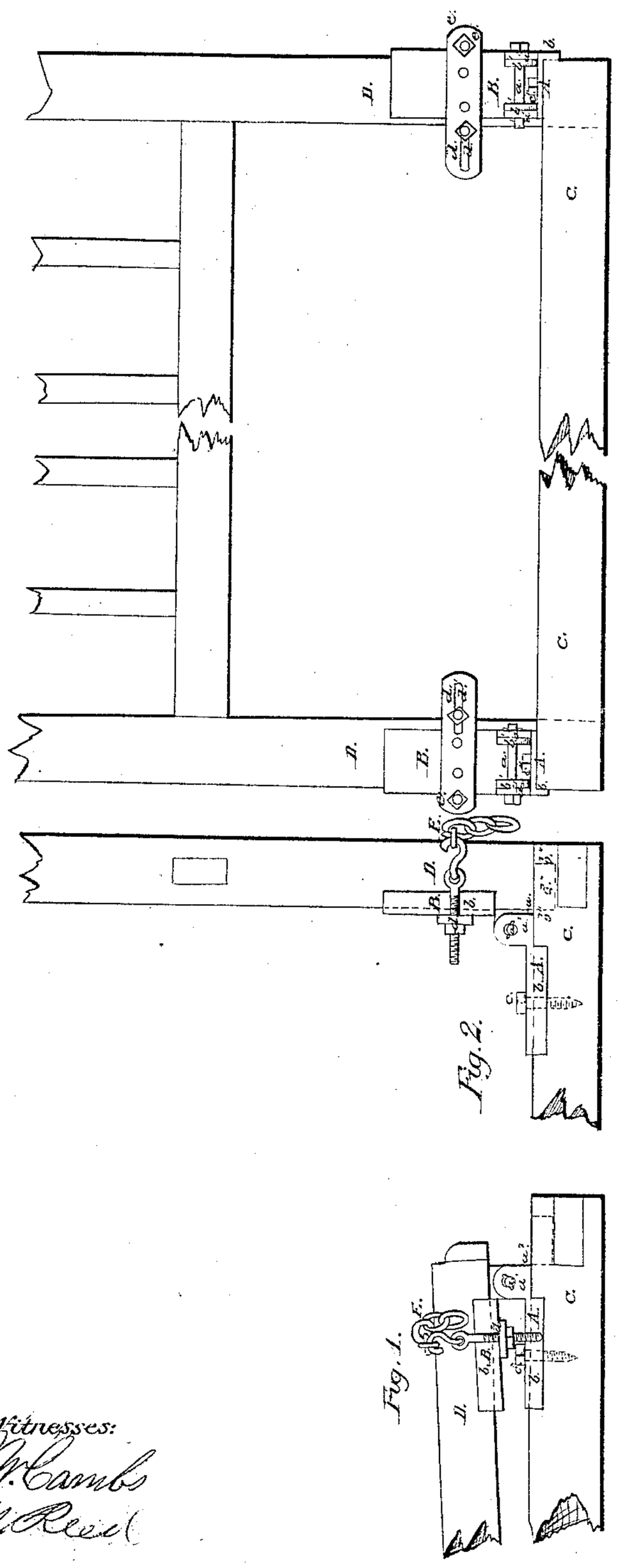

Fig. 2.

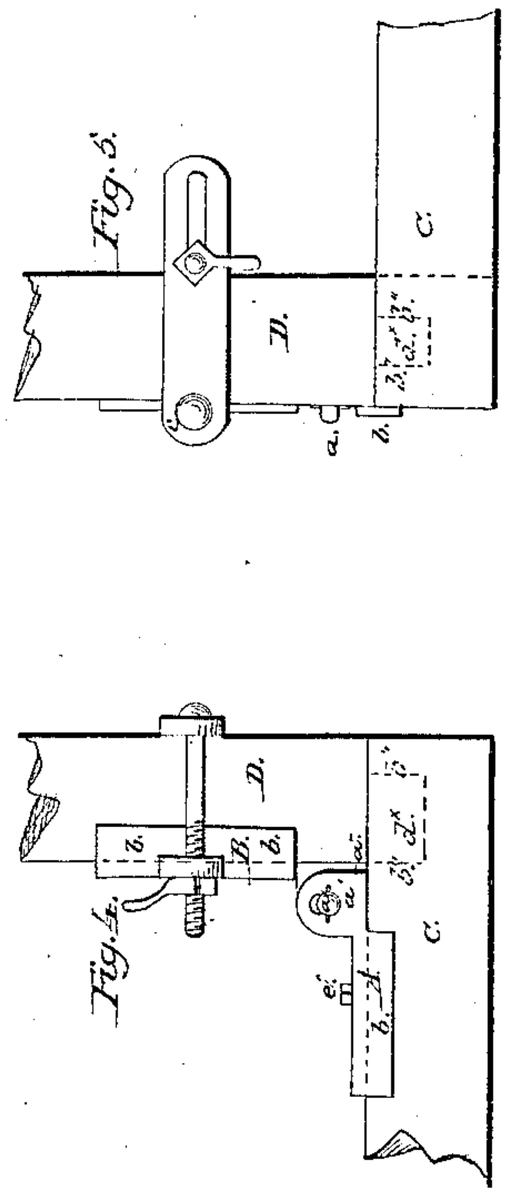

Fig. 3.

Fig. 4.

Fig. 1.

Witnesses:
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JOHN VAN GAASBEEK, OF MOUNT VERNON, N. Y.

Letters Patent No. 63,583, *dated April* 2, 1867.

IMPROVED METHOD OF RAISING BENTS IN BUILDINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN VAN GAASBEEK, of Mount Vernon, in the county of Westchester, and State of New York, have invented certain new and useful improvements in Apparatus for Raising the Bents of Buildings; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is a side view of an apparatus, constructed according to my invention, represented as applied to the "sill" and "bent" of the frame of a building, previous to raising the bent into a vertical position.

Figure 2 is a similar side view of the same, with the bent shown in an upright position.

Figure 3 is a side view taken at right angles to figs. 1 and 2, and showing the apparatus applied to the two posts of a bent, with the latter in an upright position.

Figure 4 is a side view, corresponding to figs. 1 and 2, but showing a slight modification of my invention.

Figure 2 is a side view of the same, taken at right angles to fig. 4, but of the side opposite that shown in fig. 3.

Similar letters of reference indicate corresponding parts in both figures.

The object of this invention is to enable the operation of raising the "bents" of the framework of buildings from a horizontal to their vertical position in the said framework, to be performed with a much less outlay of time and labor than by the ordinary means and appliances, and to this end the invention consists in two flange plates, hinged or pivoted together, and furnished with suitable means for being attached, one to the sill of the framework, and the other to the adjacent post of the bent, whereby one set of the apparatus being applied to each of the posts of the bent, the lower ends of the said posts are securely held in proper position and prevented from slipping while the bent is being raised or turned upward into its vertical position in the aforesaid framework, thus effectually securing the desired object. The invention further consists in a novel means whereby the apparatus is adapted to use in raising bents differing widely in the size or thickness of their posts; and, furthermore in a novel means whereby the position of the apparatus may be so gauged or adjusted as to insure the proper and easy entrance of the tenon formed on the post to which it is attached, into the mortise formed in the corresponding sill.

To enable others to understand the construction and operation of my invention I will proceed to describe it with reference to the drawings.

A and B represent two strong metallic plates, each of which is furnished at its side and near one end with two lugs or ears, situated in a longitudinal position thereon; the lugs of the plate A being marked a' in the drawings, while those of the plate B are indicated at b'. The lugs b' of the plate B are placed between the corresponding lugs a' of the plate A, and are connected therewith by a transverse pin or pivot, a, which passes through suitable holes in the several lugs, and thus pivots or hinges the two plates together. Each of the plates A B has formed upon one of its lateral edges a flanch, b, which is situated in a position transverse to the plate, as indicated more clearly in figs. 1, 2, and 4. In addition to its flanch, b, the plate B has formed upon the same lateral edge as the said flanch an ear or extension, d, in which is formed a long slot, d', and at its opposite lateral edge with a similar but shorter ear, e, in which is formed a hole of any suitable size. The extremity a^* of the plate A, near which the lugs a' of the said plate are formed, is so situated with reference to the inner surface of the plate B, that when the said plate is in a vertical position the aforesaid end of the plate A will be in line with the surface first mentioned of the plate B, whereby the said extremity of the plate A is enabled to act as a guide or gauge, by which the position of the apparatus may be so adjusted that the tenon of the post of the bent will be brought immediately over the mortise in the adjacent sill, as will be hereinafter fully explained. The plate A is placed upon the upper side of the sill, which is shown at C, with its extremity, a^*, situated just at the edge of the mortise, shown in dotted lines at b'', in figs. 1, 2, and 4, and with its flanch b in close contact with the outer side of the said sill, and is secured thereto by means of a strong screw, c^*, which passes through a suitable hole formed vertically in the said plate, and is screwed firmly into the sill. This being done, the plate B is turned back into a horizontal position over the plate A, as shown in fig. 1; and the adjacent post—marked D in the drawings—of the horizontal bent is placed thereon with the flanch b of the aforesaid plate B fitted to its outer side. The post is then securely clamped to the plate B

by means of a chain or band, E, one end of which is attached to an eye-bolt which is secured in the hole hereinbefore mentioned, of the ear *e*, and the opposite end of which is attached to a similar bolt passing through the slot *d'* of the other ear *d;* the said clamping chain being tightened to the required degree by means of suitable nuts, screwed upon the outer ends of the aforesaid eye-bolts. The two outside posts of the bent being connected each with the adjacent sill by a set of the apparatus, the bent is raised and turned upward into a vertical position, the pivots *a*, of the plates A B, holding the lower ends of the post from slipping, and at the same time freely permitting the required upward movement of the bent. Inasmuch as the inner surface of the flanches *b* of one plate is coincident with the corresponding surface of that of the other plate, it follows that the outermost lateral surfaces of the post and sill will be in line with each other as the bent is brought into its upright position; so that by this means any lateral displacement of the tenon *d** of the posts with reference to the mortises in the sills is effectually provided against. And inasmuch as the inner surface of each of the plates B, when in a vertical position, lines with the end of the contiguous mortise, it follows that the tenon of the post is brought exactly over the mortise, so that when the clamping chain or band E is loosened the weight of the bent will cause the tenon to descend into the mortise without further trouble. In order to avoid a too sudden strain upon the lugs *a'* of the plate A, when the bent is thus brought into an upright position, the holes in the said lugs, through which the pin or pivot *a* is passed, may be somewhat elongated, as shown more clearly in figs. 1, 2, and 4. Inasmuch as the slot *d'* allows the eye-bolts, to which the ends of the clamping chain E are attached, to be placed at any desired distance apart, it follows that the plate B may be clamped upon a post of any desired size, thus enabling the apparatus to be employed in raising bents differing in the width of their posts. As a means of clamping the plate B to the post, equivalent to that just herein described, a bar, constructed with a slot in one end corresponding in shape and size with that of the ear *d*, and with a hole in the other end answering to that in the ear *e*, may be placed transversely upon that side of the post opposite that at which the said plate B is situated, and connected with the latter by means of bolts passing through the hole and slot of the said bar, and through those of the ears *d e*, as shown in figs. 4 and 5, the said bolts being tightened by means of nuts, in substantially the same manner as the eye-bolts hereinbefore described.

Having thus fully described my invention, I do not claim a timber clamp for the purpose specified *per se*, as such apparatus has been used before; but what I claim as new, and desire to secure by Letters Patent, is—

1. The two flanged plates A B, pivoted together and furnished with suitable appliances whereby they may be attached to the post of a bent and to the sill, in the manner herein set forth for the purpose specified.

2. The arrangement of the extremity *a* of the plate A, with reference to the inner surface of the plate B, and of the flanched sides of said plates, that the said extremity and sides shall serve as guides for directing the tenon on the post into the mortise in the sill, substantially as set forth.

3. The construction of the plate B, with the slotted ear *d*, whereby the clamping chain F, or its equivalent, may be adjusted to clamp the plate B to posts of any desired size, substantially as herein set forth.

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Witnesses:

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