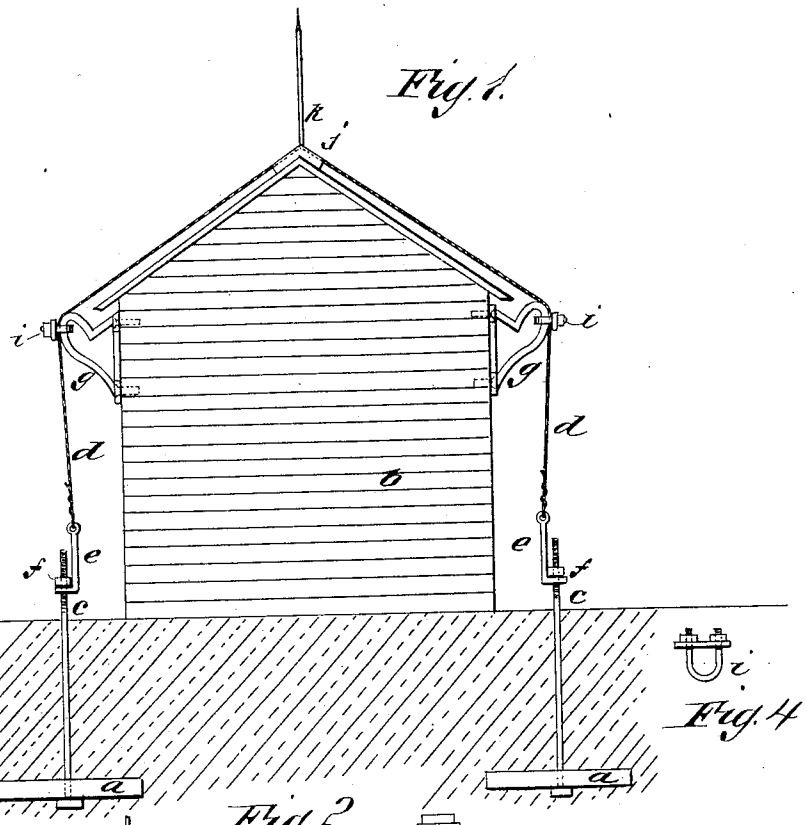
(No Model.)

E. CROWELL & E. C. DAWSON.

PROTECTING APPARATUS FOR BUILDINGS.

No. 269,018. Patented Dec. 12, 1882.

Fig. 1.



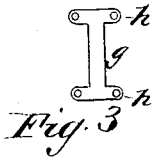
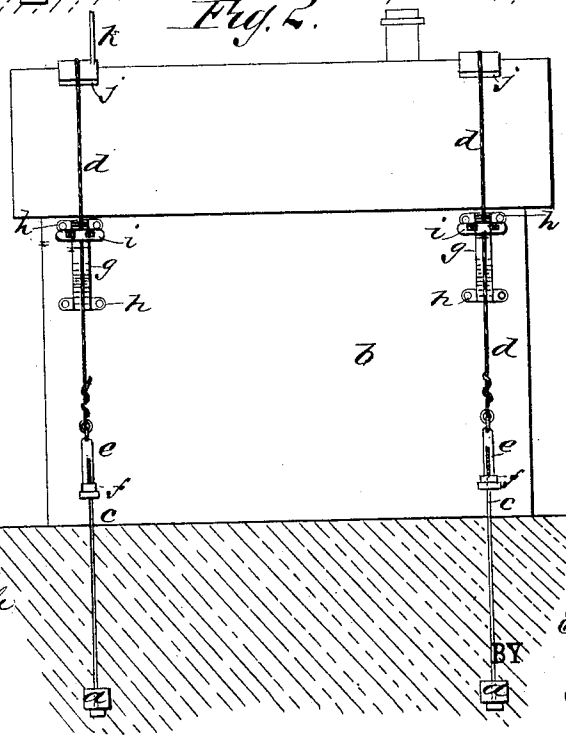


Fig. 3

Fig. 4

Fig. 2.



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UNITED STATES PATENT OFFICE.

EZRA CROWELL AND ELISHA C. DAWSON, OF DAWSON, NEBRASKA.

PROTECTING APPARATUS FOR BUILDINGS.

SPECIFICATION forming part of Letters Patent No. 269,018, dated December 12, 1882.

Application filed September 15, 1882. (No model.)

To all whom it may concern:

Be it known that we, EZRA CROWELL and ELISHA C. DAWSON, of Dawson, Richardson county, Nebraska, have invented a new and Improved Protecting Apparatus for Buildings, of which the following is a full, clear, and exact description.

Our invention consists of improvements in the construction and arrangement of apparatus for anchoring buildings for safety during storms, and in the combination of a lightning-rod-point attachment therewith, to utilize the rods of the anchoring device for the main portion of the lightning-rod, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an end elevation of a house and section of the ground whereon it stands, showing our improved anchoring devices and lightning-rod attachment. Fig. 2 is a similar view, looking at the side of the house; and Figs. 3 and 4 are details.

We propose to embed timbers, stones, or other suitable anchors, *a*, in the ground in any suitable relation to the building *b*, but preferably near the corners, as shown in the drawings, from which we extend metal rods *c* up through the surface of the ground, suitably for the connection of rods or wire ropes *d* by means of links *e* and adjusting-nuts *f*, or equivalent devices, whereby said rods or ropes, which pass over the building to secure it, may be tightened up from time to time or slacked off, as required, and so that they may be readily detached and taken off during seasons when the storms do not occur.

The object of arranging the anchors in the vicinity of the corners of the building is to enable the cords or rods to be located over the end framing and studding of the structure, where the strength to resist the strain is greatest.

For passing the cords or rods over the eaves of the building, we locate brackets *g* thereat over which to strain them, said brackets being constructed in any desired form, with suitable breadth of bearings, *h*, for due support on the side of the house, and we propose to fasten the said rods or cords to the brackets by clamps *i* to prevent them from being displaced.

At the peak of the building we propose to arrange a metallic saddle, *j*, for a bearing thereon, the saddle being grooved or otherwise prepared to retain the rope or rod; and to one or more of these saddles we propose to attach a lightning-rod point, *k*, to utilize the anchor device for a protector from lightning also, thus enabling the anchor device to serve a double purpose, whereby we economize in the cost.

By the employment of the tightening device in the anchor rod or chain we are enabled to slack off the strain in times when it may not be needed to keep the same in tension, and thus avoid straining the building too much by the contraction of the metal in cold weather. We can also adjust the tension from time to time, as may be required by variations of temperature.

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

1. In anchoring apparatus for buildings, the cords or rods *d*, detachably and adjustably connected to rods *c*, attached to the anchors and extending to the surface of the ground, or thereabout, substantially as described.

2. The combination of anchors *a*, cords or rods *d*, eaves-brackets *g*, and peak-saddle *j* with a building, substantially as described.

3. The combination of clamps *i* with the cords or rods *d* and eaves-brackets *g*, substantially as described.

4. The combination, in a building-protector, of anchored cords or rods *d* and a lightning-rod point, *k*, substantially as described.

5. The combination, in a building-protector, of anchored cords or rods *d*, peak-saddle *j*, and a lightning-rod point, *k*, substantially as described.

EZRA CROWELL.
ELISHA CHARLES DAWSON.

Witnesses:
HARRIET DAWSON,
ANDREW DAWSON.