

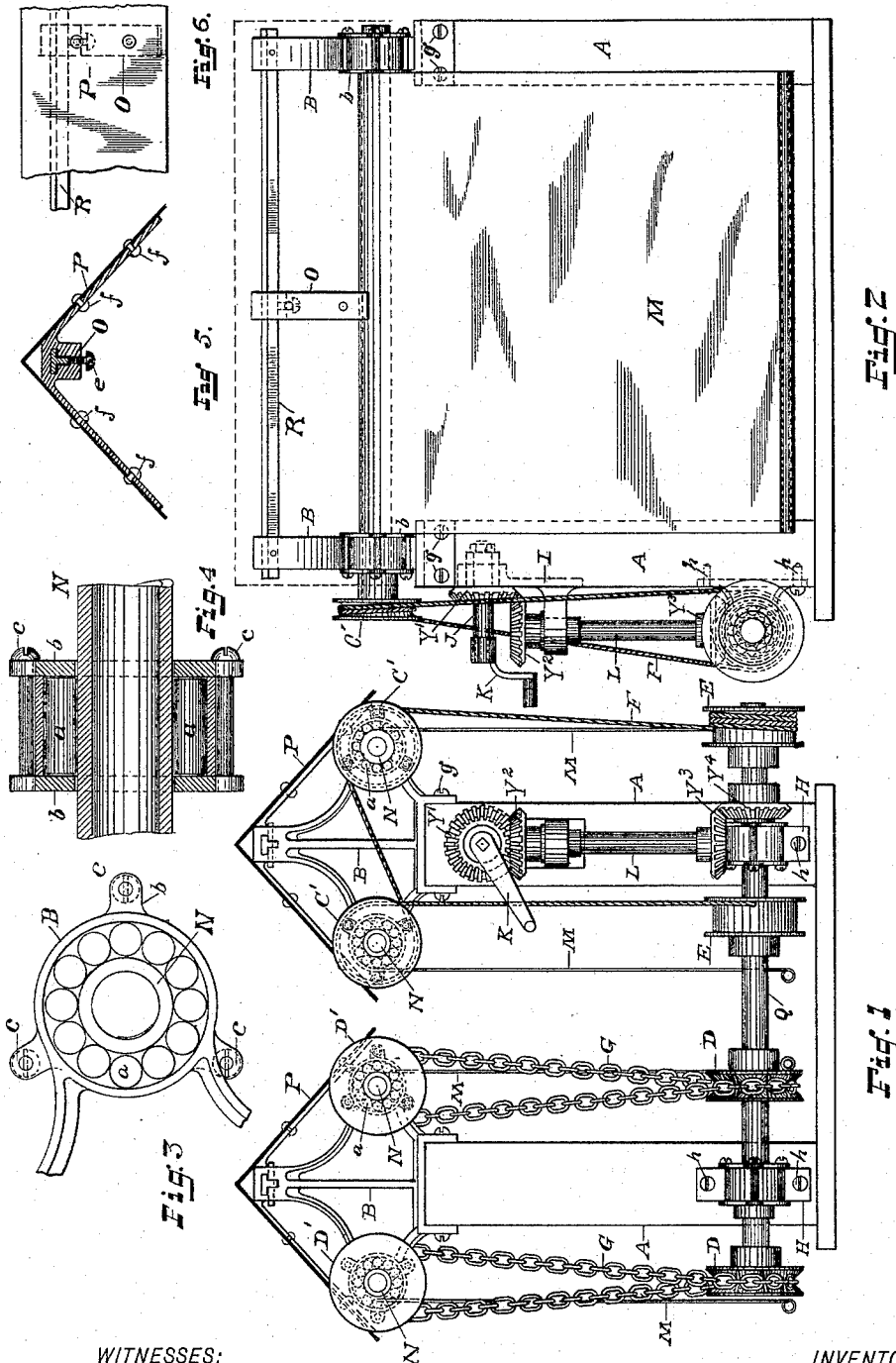
(No Model.)

3 Sheets—Sheet 1.

A. C. CONTANT.
UNDRIED BRICK PROTECTOR.

No. 492,388.

Patented Feb. 28, 1893.



WITNESSES:

W. H. Brighton

R. S. Robertson

INVENTOR

Auguste Claude Contant

BY *Chapin & Denny*

his ATTORNEYS.

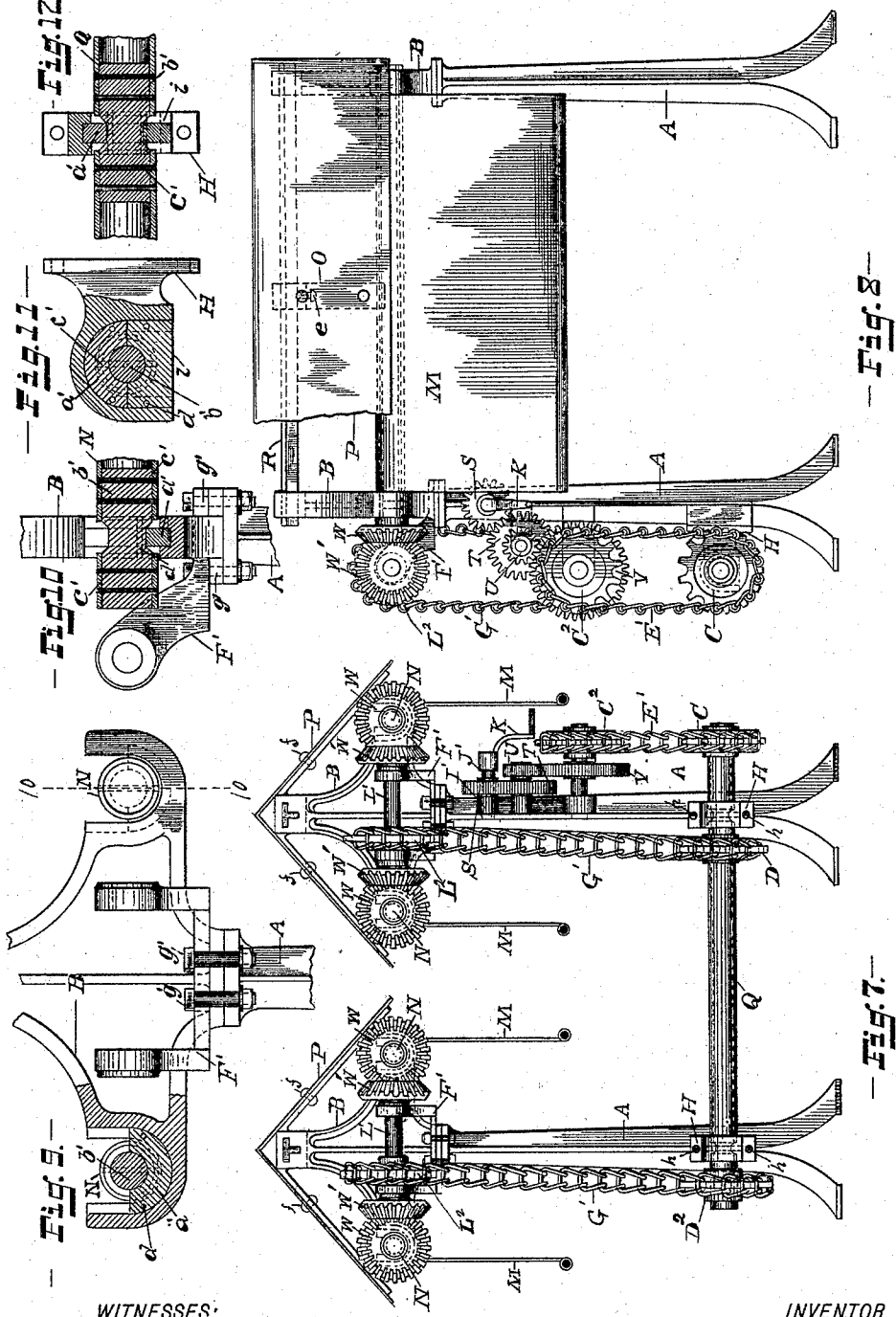
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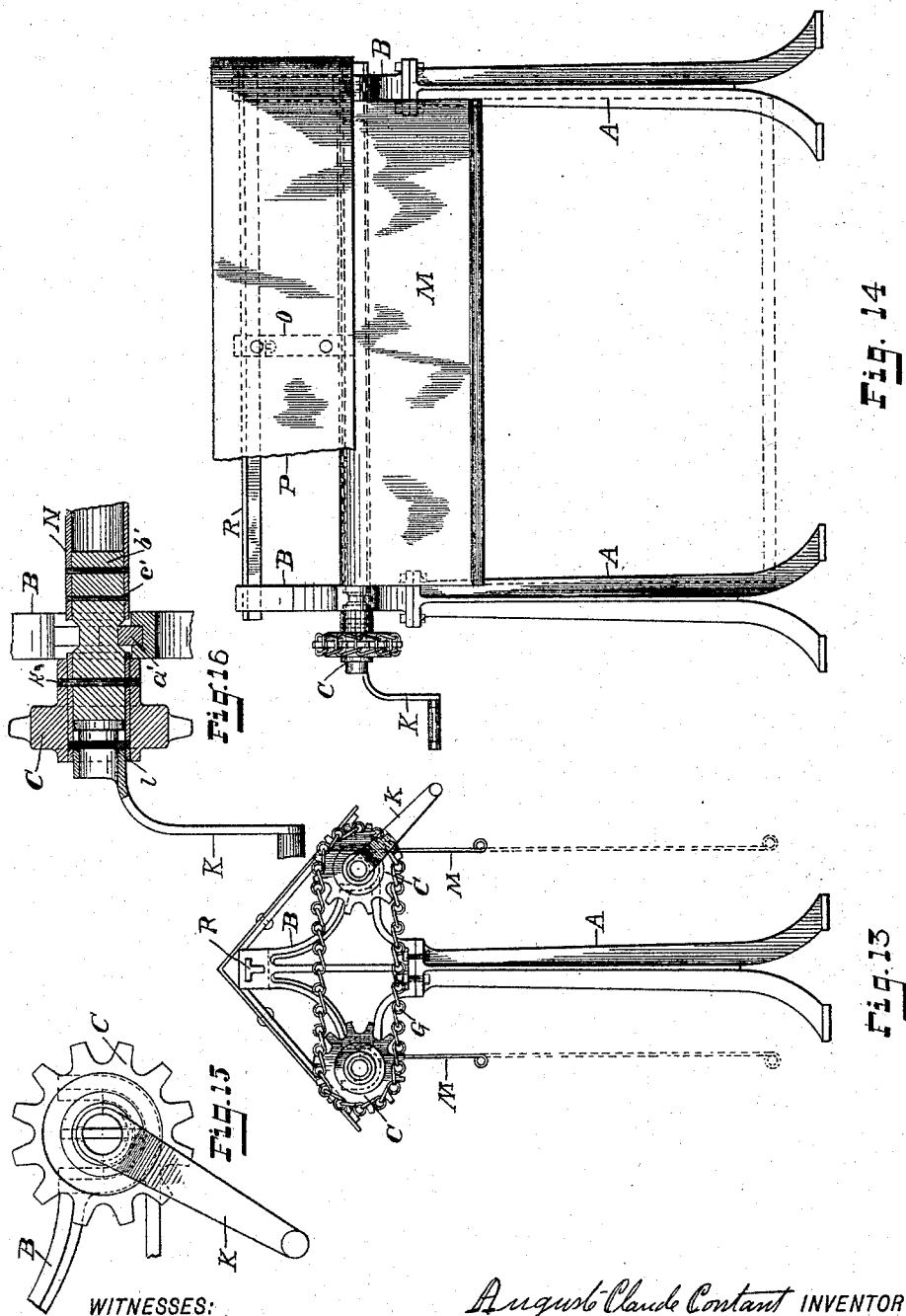
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UNITED STATES PATENT OFFICE.

AUGUSTE CLAUDE CONTANT, OF FORT WAYNE, INDIANA.

UNDRIED-BRICK PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 492,388, dated February 28, 1893.

Application filed October 10, 1892. Serial No. 448,306. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTE CLAUDE CONTANT, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Undried-Brick Protectors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improved means for covering and protecting the sanded and undried brick against the destructive effects of sudden storms of rain and sleet while upon the brick yard, awaiting inclosure in the kiln.

The usual method now in vogue for protecting the undried brick, thus necessarily deposited for a time upon the open yard, in case of rain or sudden storms, is to cover them temporarily with loose boards or lumber in a hasty and imperfect manner, involving great labor, waste of time and vexatious inconvenience, in the carrying and placing of the said boards or other materials in position for a temporary shelter, and in the removal of the same from the yard each time they are thus employed. Besides, such a loosely constructed temporary shelter is necessarily a very inefficient and unsatisfactory protection, and in case of severe or protracted rains, invariably results in the loss of large quantities of the said unburned brick. The object, therefore, of my invention is to provide an efficient protector for unburned brick, of economical construction and convenient operation, by means of which a single operator can promptly and effectively shelter and protect an almost unlimited number or quantity of undried brick upon a brick yard in any emergency by the simple operation of a crank lever.

My invention consists in the novel construction and combination of the several parts as will be hereinafter set forth and described and particularly pointed out in the claims.

The objects of my invention are accomplished by the mechanism illustrated in the accompanying drawings forming part of this specification, in which similar letters indicate corresponding parts in the several views.

Figure 1 is a front elevation of my invention showing one part or section thereof as operated by a cable and the other part by a link chain. Fig. 2 is a side elevation of the same showing the arrangement of the roof support and the protecting curtains. Fig. 3 is a detail of the roller bearing for the curtain shafts. Fig. 4 is a vertical central section of the same showing the antifriction rollers. Fig. 5 is a detail of the adjustable roof support. Fig. 6 is a side elevation of Fig. 5, showing the roof in section and manner of securing the same. Fig. 7 is a front elevation of my improvement as it appears when operated by ladder chains and miter gears. Fig. 8 is a side elevation of the same with the roof broken away in section. Fig. 9 is a detail of the upper bracket in section showing another form of antifriction bearings. Fig. 10 is a vertical section of the same on the line 10—10 of Fig. 9. Fig. 11 is a detail of another form of bearing for the line shaft. Fig. 12 is a sectional elevation of the same. Fig. 13 is another form of my invention with the line shaft omitted. Fig. 14 is a side elevation of the same with the roof broken away in section. Fig. 15 is a detail of the upper bracket showing the chain wheel and operating handle. Fig. 16 is a vertical central section of the same.

The upright posts or standards A, the brackets B adapted for carrying transverse curtain shafts N and the T rail roof support R rigidly secured in said brackets constitute the frame work of my invention.

Referring now to Figs. 1 and 2, the upright posts A are of any proper size or material, of a suitable height for supporting either end of the curtain shafts N, and they may be arranged at any distance apart, preferably about eighteen feet, as seen in Fig. 2.

Upon the base of standard A is firmly secured the shaft bearing H by means of the bolts h or other proper manner, in which bearing is properly mounted the line shaft Q, which may be of any desired length having a bearing H on any number of posts A, arranged in rows a few feet apart as seen in Fig. 1.

On the line shaft Q, is rigidly mounted a proper number of chain or sprocket wheels D, cable wheels E, or other equivalent device, adapted to be operated by the link chains G

and the cable F, or by the ladder chain G, as seen in Figs. 7 and 8.

Upon the post or standard A, is properly secured the bearing casting I, Fig. 2, adapted to secure the counter shaft J, carrying a miter wheel Y', and the vertical operating shaft L carrying upon its upper extremity the miter wheel Y² adapted for engagement with the gear-wheel Y', and upon its lower extremity the gear wheel Y³, adapted to engage the miter wheel Y⁴, which is rigidly secured to the shaft Q. The counter shaft J is provided at its outer extremity with an operating handle K.

Upon the top of each of the posts or standards A is rigidly secured the roof supporting bracket B, preferably of iron, by means of the bolts *g* or other proper manner, which bracket is properly perforated for the reception of the T rail R, and is provided with suitable bearing castings upon either side of said standard, said bearing castings having side plates *b* and provided with a suitable arrangement of antifriction rollers *a*, of well known construction, as seen in Figs. 3 and 4. The bearings H for the line shaft Q also consists of a like arrangement of antifriction rollers, as seen by dotted outline in Fig. 2. Suitably mounted in the said bearings of the bracket B are the shafts N, preferably two in number for each bracket B to which shafts N are properly secured the water proof curtains M of any suitable material and reaching quite to the base of the standard A. The shafts N, of any desired length and material, may be sustained by any proper number of the brackets B, having suitable bearings therein, and are provided at one extremity with a suitable chain wheel or sprocket wheel D' or cable wheel C' or other equivalent device, rigidly secured to said shaft, and adapted to be operated by the link chain G, the cable F or other equivalent device. The link chains G and the cable F are so adjusted upon the wheels D and D' and E and C' as to cause the shafts N to rotate in the same direction at the same time, when operated by the handle K, said chains or cable being also properly mounted upon and secured to the wheels D and E.

The brackets B are properly perforated for the reception of the T rail R upon which the roof supporting brackets O are adjusted in any desired position, by slipping them over the end of the rail R, they may be readily secured by the set screw *e*, as seen in Figs. 5 and 6. Upon the brackets O is then rigidly secured a suitable roof, of any desired length and material but preferably of metal, by means of the rivets *f*, or in any other suitable manner, the same being preferably of sufficient width to project beyond the drop curtains M, thus affording a more perfect shelter.

Instead of the arrangement of gear wheels shown in Figs. 1 and 2 as above described, the arrangement of gears shown in Figs. 7 and 8 may be employed, without in the least departing from the spirit of my invention, which

arrangement may be described as follows: At proper points upon the shaft Q are rigidly secured the spur or sprocket wheels C, D and D², adapted for carrying the operating chains G' and E'. Upon one end of the shafts N are rigidly secured the miter wheels W adapted for engaging the miter wheel W'. Rigidly mounted upon the standards A are properly arranged the bracket or bearing casting F' in which is properly mounted the counter shaft L' carrying the sprocket wheel L², which is connected to the line shaft Q by the operating chain G', and also carrying the miter wheels W'. To one of the standards A is properly secured shaft J' carrying the operating handle K and the pinion S in gear with the intermediate wheel T, adapted to turn the pinion U which by being in gear with the wheel V is adapted to turn the sprocket wheel C' connected to the wheel C on the shaft Q by the link chain E'. This arrangement of the said gears gives the operator more power at the expense of time, and is preferable where a large number of the shafts N are employed. The line shaft Q is preferably a hollow cylinder and may very properly be constructed of gas pipe, and instead of the bearing shown in Figs. 3 and 4, the shaft Q may be cut into and then united by a solid plug *b'*, held in place by the rivets *c'* and provided with a suitable antifriction washer *a'* as seen in Figs. 9 and 10.

Figs. 13 and 14 represent the simplest form of my device, having but one tier of posts or standards and adapted to operate but one pair of curtains, requiring no gear wheels and requiring no line shaft, but operated by a single link or ladder chain, or equivalent device, and having the operating handle K secured to the extremity of the curtain shaft N.

The operation of my improvement, thus described, is as follows: When it is desired to inclose and securely protect the undried brick, which are piled in a proper manner between the posts or standards A and beneath the roof P, the operator, by means of the operating handle K and the connecting gearing, rotates the line shaft Q, which by means of the connecting chains or cables rotates the parallel shafts N upon which the water proof curtains M are properly rolled, in such a manner as to lower them into the position seen in Figs. 1 and 2, thus affording a complete and effective shelter to the inclosed brick, in the most severe and protracted storm. When there is no occasion for using the curtains M the operator can readily replace them on the curtain shafts by the operating handle K, they will be under the roof P and out of the way, thus freely admitting the sunshine and air for the purpose of drying the said brick preparatory to placing them in the burning kiln. As the said roof P and the curtain shafts N may be of any desired length, and as the line shaft Q may also be of any desired length and adapted to operate any desired number of said curtain shafts, it is clear that an operator in a few moments of time can

conveniently inclose and protect an unlimited number of undried brick when piled upon the yard and undergoing the essential process of drying, preliminary to burning.

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

1. In a brick protecting device, the combination of the standards A having the supporting brackets B mounted thereon adapted to support the curtain shafts N and the roof P, with the revoluble shafts N mounted in suitable bearings in said brackets, and carrying upon one end thereof suitable chains or sprocket wheels adapted to be operated by the chain G, and operating handle K adapted to turn the shafts N, a longitudinal plate or T rail R adapted to connect said brackets and adjustably secured therein, a roof support O adapted for adjustment on the plate or rail R, a roof P secured to said support O, and the water proof curtains M mounted upon the shafts N and adapted for vertical adjustment thereon, all substantially as set forth and described.

2. The combination in an undried brick protector, of the posts or standards A, the brackets B rigidly mounted upon said standards, and provided with the antifriction rollers a, for the bearing of the shafts N, a T rail

or other suitable connecting plate adapted for securing the roof support O and the roof P, the adjustable support or bracket O, the roof P, and the longitudinal shafts N revoluble in suitable bearing in the brackets B, and adapted to properly secure the protecting curtains M, with the line shaft Q, provided with suitable bearings H on the standard A and having the sprocket wheels D, the cable wheels E, or their equivalent, and the gear wheel Y⁴ rigidly mounted thereon, the vertical operating shaft L properly mounted on the standard A, having upon its lower extremity the gear wheel Y³ adapted for engagement with the gear wheel Y⁴, and having upon its upper extremity the gear wheel Y² adapted for engagement with the gear wheel Y¹, the counter shaft J properly mounted upon the standard A and provided with a gear wheel Y' and an operating handle K, and the wheels C' and D' rigidly mounted upon the shafts N and adapted to be rotated by the cables F and the link chains G, all substantially as described.

Signed by me this 5th day of October, 1892.

AUGUSTE CLAUDE CONTANT.

Witnesses:

LOU. G. SCHOLZE,
EDWARD L. CRAW.