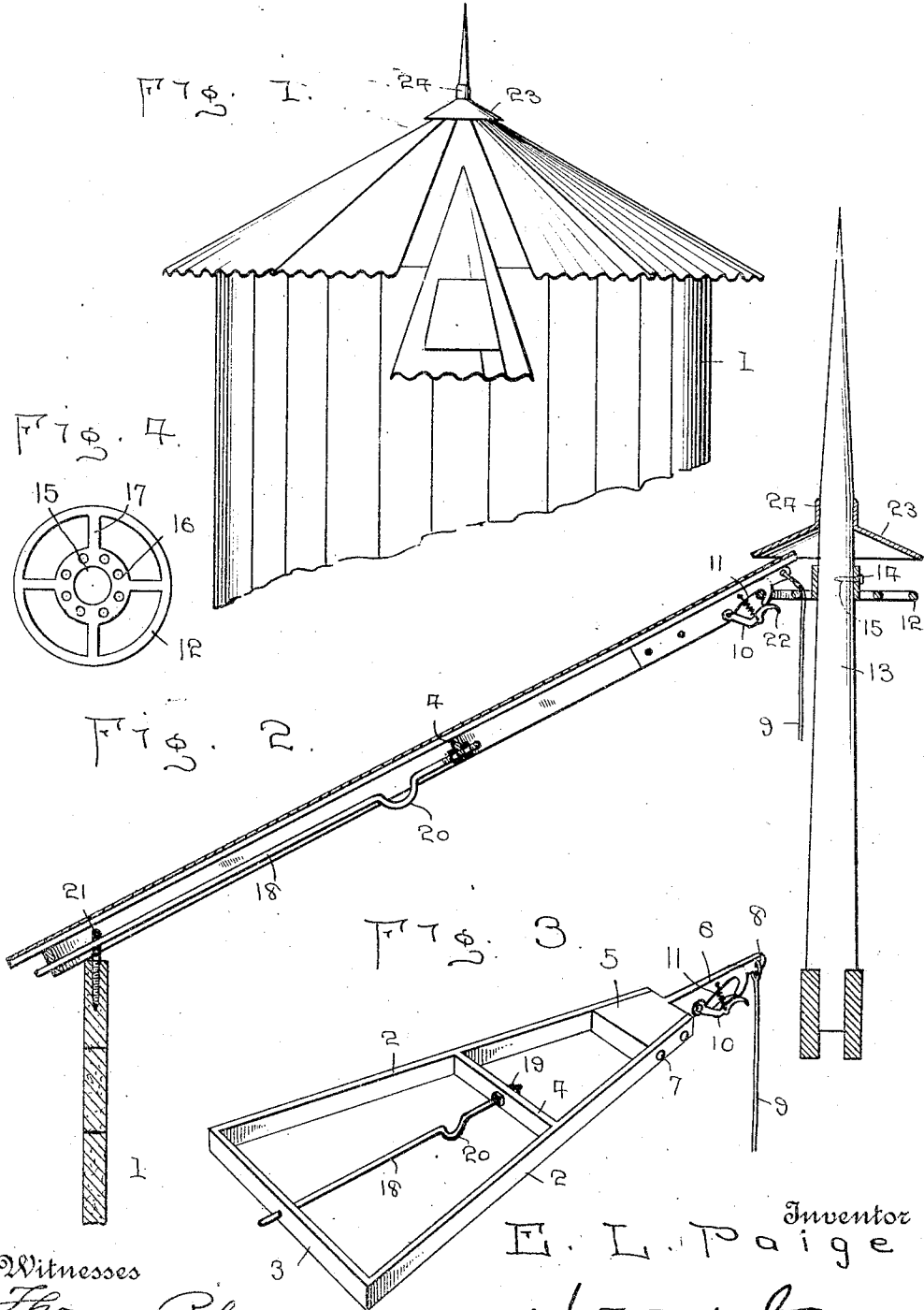


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SECTIONAL ROOF FOR SILOS AND THE LIKE.
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Patented Mar. 25, 1913.



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SECTIONAL ROOF FOR SILOS AND THE LIKE.

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To all whom it may concern:

Be it known that I, EARL L. PAIGE, a citizen of the United States, residing at Springfield, in the county of Sangamon and State of Illinois, have invented certain new and useful Improvements in Sectional Roofs for Silos and the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to roof construction, and while my improved form of roof will be desirable for various kinds of buildings, yet it is designed especially to meet the requirements for an efficient roof upon silos, and my prime object, among others, is to provide a roof, the parts whereof may be very readily disposed, each in its respective operative position and very easily removed therefrom, as may be found necessary from time to time.

A further object of my invention is to so form the roof sections that each section may be disposed in its operative place upon the roof and in complete coöperation with the contiguous cooperating sections.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which.

Figure 1 shows my improved roof complete, as upon a silo or circular form of building. Fig. 2 is a sectional view of one of my roofing sections disposed in its operative place, and also showing the roof tree or supporting pole disposed in the central portion of the roof. Fig. 3 is a perspective detail view showing the framework of one of my improved roof sections. Fig. 4 is a detail plan view of the post member or collar, designed for coöperation with the inner ends of each of the roof sections.

In order to conveniently refer to the various details of my invention and coöperating accessories, numerals will be employed, the same numeral applying to a corresponding part throughout the views.

In materializing my invention, the roof sections are each formed so as to present an elongated triangle in all cases where the roof is circular in form or designed to cover a circular building, as upon a silo, the said roof sections being disposed upon the supporting walls 1 which may be made of ce-

ment, brick, wood or other preferred material and of any desired form, as circular, octagonal, square or the like. Upon the walls thus or otherwise constructed, I mount my plurality of roof sections consisting of a triangular form section comprising the side members 2, the base member 3, and the cross bar 4. To the converging ends of the members 2, I secure in any preferred manner, the body portion 5 of the hook section 6, as by suitable bolts or rivets 7 or equivalent means. The hook member 6 may be made in any desired manner though I preferably form the same as shown in Fig. 3 of the drawings, wherein it will be observed that the extreme outer end is provided with the eye section 8, through which the end of a rope 9 may be passed and secured. I also provide the locking jaw 10 which is held normally closed by the spring member 11, whereby when the jaw is opened, the terminal of the hook 6 will engage the ring or collar 12 mounted upon the center post 13 in any desired way, as by means of the flange 14 fitting tightly around said post and properly secured by the bolt 15 or equivalent means. The said collar or ring 12 is illustrated in detail in Fig. 4 and comprises the ring proper formed integral or connected with the body portion 16 carried by the flange 15, it being understood that a plurality of rope receiving apertures 17 is formed in said body for the obvious purpose of disposing the rope 9 therethrough incident to the work of drawing the several roof sections into their respective operative places. Each of the roof sections is provided with an anchoring member or rod 18 having its lower end extended through an opening in the base member 3, as shown in Fig. 3 while the upper end thereof is extended through an aperture in the cross bar 4 where it is secured in any preferred manner as by the retaining nut 19 or equivalent means. The anchoring rod 18 is provided with a downwardly extending bent section 20 designed to coöperate with the screw eye or bolt 21, anchored in the upper edge of the wall and designed to hold the roof section from casual displacement as in preventing the lower end thereof from rising when located upon the roof and furthermore, designed for coöperating with the bent section or curved member 20, when the roof section is dropped downward parallel with the outside of the wall incident to the filling

of the silo or for purposes of ventilation as may be found desirable.

By providing the eye or apertured extension 8 for engagement with the rope 9, the operator by means 6 of the said rope is enabled to easily and readily draw each of the roof sections into place and into engagement with the supporting collar or ring 12, as would be obvious from the showing made in the drawings.

It will be observed that the several roof sections are disposed around the center post and each of the hook members 6 is brought into engagement with its respective section of the collar or ring 12 when the clamping jaw 10 will close said hook and insure against casual disengagement thereof. It will be observed that the locking jaw 10 is provided with a curved extension or lip 22, whereby when the rope or cable member 9 is entered through one of the openings 17 in the body portion 16 and a strong pull is exerted thereon, the roof section will be drawn sharply upward, causing the lip 22 to engage the ring or collar 12, thereby insuring that the jaw 10 will snap over the same and the spring 11 will hold the jaw against casually opening. When however, it is desired to disengage the hook member, the inner end thereof may be raised slightly, causing contact between the ring member and the jaw which will insure that the tension of the spring 11 will be overcome and the jaw opened.

Above the meeting ends of the several roof sections, I dispose in permanent engagement with the center post, a cap member 23, having the collar 24 to fit snugly around the post and permitting the said cap 23 to be reliably anchored in its operative position, slightly above the inner ends of

the roof section. By adjusting the cap section 23 slightly above the roof sections, it is obvious that inasmuch as the ends of the roof sections do not reach snugly against the center post, an annular space will be left around said post to insure perfect ventilation and the escape of gases incident to the curing process.

It will be understood that the various parts of my invention may be varied in formation, as desired, and I therefore wish to comprehend in this application all substantial substitutes and equivalents as may be regarded as falling fairly within the scope of my invention.

It will be understood that the several frame sections of the roof may be properly covered in any desired manner, preferably by corrugated sheet metal of such character and size as to insure that the edge of one of the roof sections will overlap the edge of the contiguous section or sections.

Having thus described my invention, what I desire to secure by Letters Patent is:

In a silo, a wall, a center post, screw eyes secured to the top of said wall, roof sections removably secured at the inner ends to said center post, anchoring rods having inner bent portions and carried by said roof sections, said anchoring rods being slidably mounted within said screw eyes thereby permitting said roof sections to slide outwardly and swing into vertical position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EARL L. PAIGE.

Witnesses:

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