

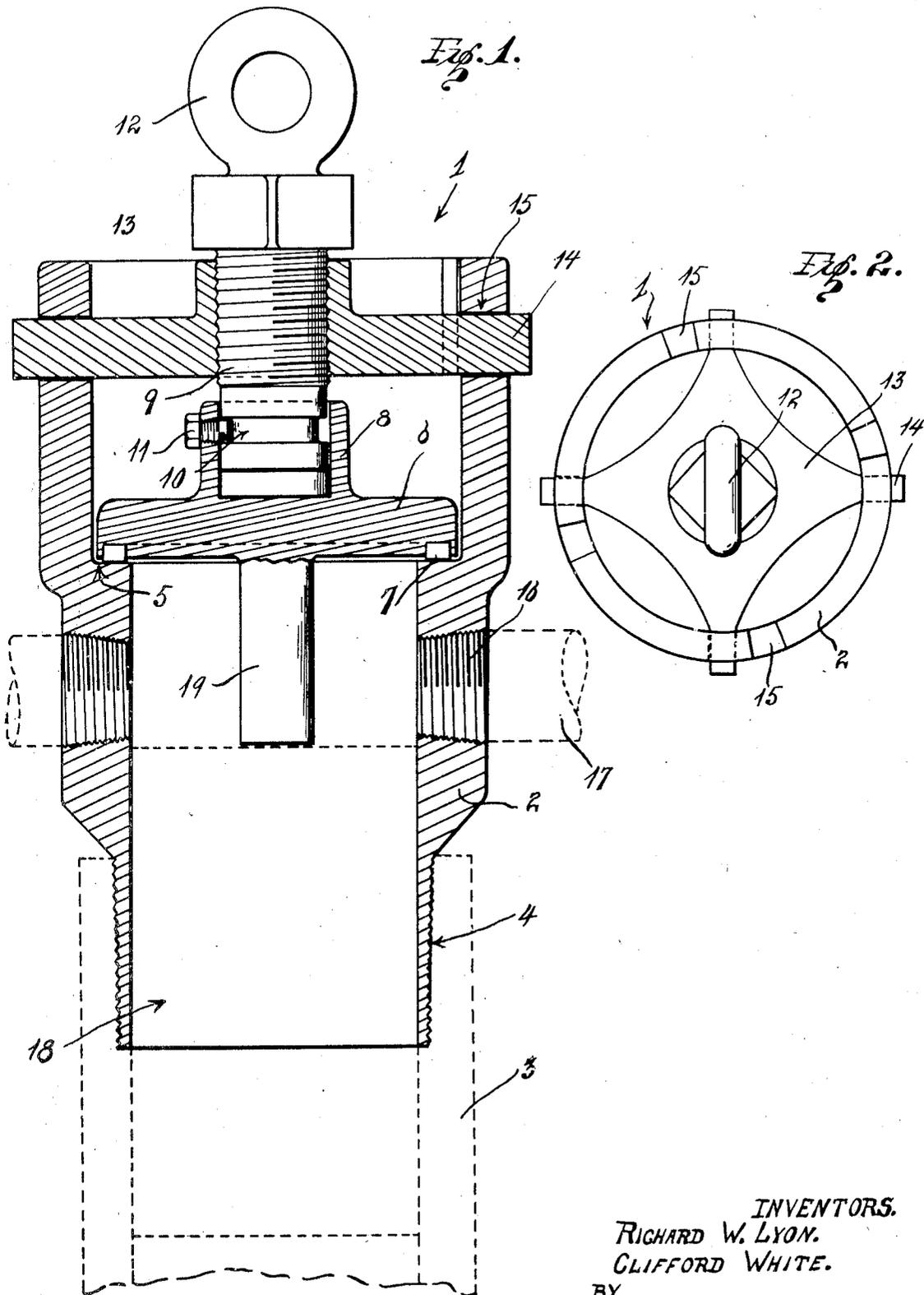
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CEMENT HEAD

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CEMENT HEAD.

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An object of our invention is to provide a cement head which will positively be sealed and prevent the leakage of cement therefrom.

Another object is to provide a quick acting clamp for the seating member so that said member may be quickly removed and set in place as desired.

A still further object is to provide a flat seating member whereby more effective sealing is provided in our head.

Other object, advantages, and features of invention may appear from the accompanying drawing, the subjoined, detailed description, and the appended claims.

In the drawing;

Fig. 1 is a longitudinal sectional view of our head.

Fig. 2 is a plan view on a reduced scale of the head.

Referring more particularly to the drawing:

Our head 1 comprises a tubular shell 2 which is threaded into the top of the casing 3 as at 4. The shell 2 is provided with a seat 5 adjacent the upper end thereof and a flat disc 6 is adapted to rest on said seat and seal the upper end of the head. The disc 6 is provided with a fibrous packing ring 7 which rests on the seat 5 thus providing an effective seal against the passage of cement. A collar 8 rises from the top of the disc 7 and the lower end of a threaded pin 9 extends therein. An annular groove 10 is provided in the pin 9 and a set screw 11 extends through the collar 8 into said groove thereby swivelly mounting the disc 6 on the pin. The pin 9 is provided with a head 12 whereby said pin may be suitably rotated to force the disc 6 downwardly onto its seat. The pin 9 screws through a spider 13, said spider being provided with arms 14 which extend into bayonet slots 15 adjacent the upper end of the shell 2. Thus it will be seen that by dropping the arms 14 into the slots 15 and imparting a slight rotary movement to the spider that said spider will be held against longitudinal movement in the shell 2.

The shell 2 is provided with a plurality of threaded openings 16 into which pipes are screwed and the cement mixture is forced through the pipes, as at 17, through the head 1. The openings 16 are positioned below the seat 5 and when the disc 6 is in position on said seat, the cement is prevented from moving upwardly in the head 1. In the cement-

ing of wells it is customary to place a block in the head and then force the cement on top of said block which block passes downwardly through the casing 3.

This block is shown in dotted lines at 18, and in order that said block will not obstruct the openings 16 we provide a post 19 which depends from the disc, said post serving to force the block downwardly below the openings 16 when the disc 6 is seated.

It will be evident from our construction that we provide an effective seating means past which the cement cannot be forced, said seating means being quickly adjustable and removable by reason of the spider 13 and the threaded pin 9. When the arms 14 are in position in the slots 15, the threaded pin 9 will force the disc 6 downwardly and urge the spider 13 upwardly, thus securely holding said members in position.

Having described our invention, we claim:

1. A cement head comprising a tubular body adapted to screw into the top of the well casing, a seat in said body, a disc adapted to rest on said seat, a spider removably secured to said body, a threaded pin extending through the said spider, and means swivelly mounting the disc on said threaded pin.

2. A cement head comprising a tubular body adapted to screw into the top of the well casing, a seat in said body, a disc adapted to rest on said seat, a spider removably secured to said body, a threaded pin extending through the said spider, and means swivelly mounting the disc on said threaded pin, said body having cement inlet ports below said seat, and a post depending from said disc, said post extending below said ports when the disc is seated.

3. A cement head comprising a tubular body adapted to screw into the top of the well casing, a seat in said body, a disc adapted to rest on said seat, a spider removably secured to said body, a threaded pin extending through the said spider, a collar extending upwardly from the disc, said pin extending into said collar, said pin having an annular groove formed therein, and a set screw extending through said collar to said groove whereby the disc is swivelly mounted on the pin.

4. A cement head comprising a tubular body adapted to screw into the top of the well casing, a seat in said body, a disc adapted to rest on said seat, a spider removably

secured to said body, a threaded pin extending through the said spider, a collar extending upwardly from the disc, said pin extending into said collar, said pin having an annular
5 groove formed therein, and a set screw extending through said collar to said groove whereby the disc is swivelly mounted on the pin, said body having cement inlet ports below said seat, and a post depending from said
disc, said post extending below said ports 10 when the disc is seated, and a fibrous packing ring on said disc adapted to rest on said seat.

In testimony whereof, we affix our signatures.

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