

J. E. MARTIN.
CASING HEAD PACKER.

Patented Dec. 14, 1897.

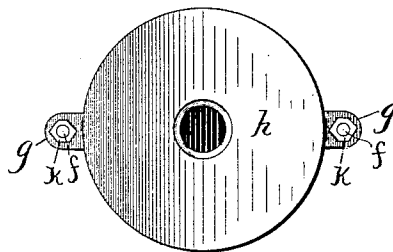
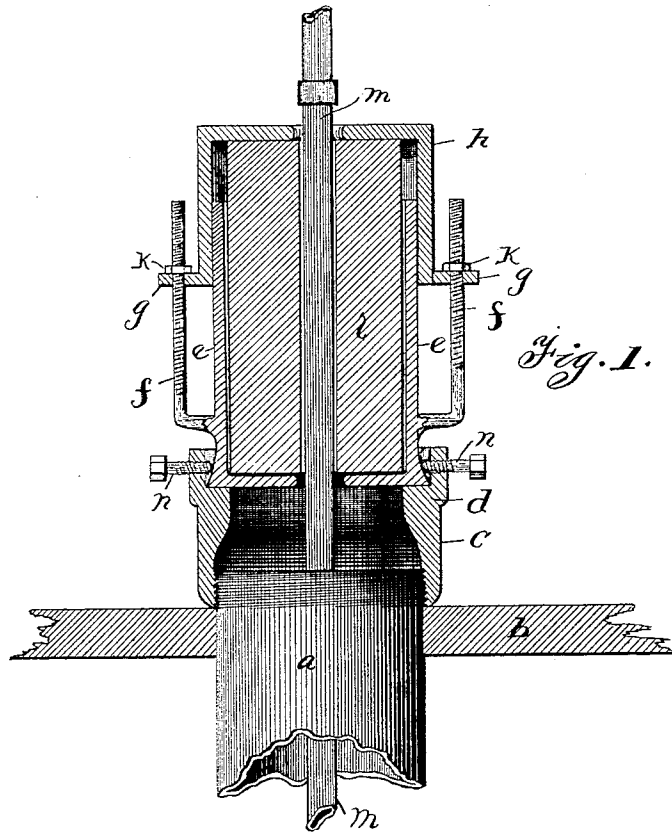


Fig. 2.

Witnesses
Frank H. Stright.
A. M. Wilson

Inventor
John E. Martin.

By Henry C. Errol. Attorney

UNITED STATES PATENT OFFICE.

JOHN E. MARTIN, OF STURGEON, PENNSYLVANIA.

CASING-HEAD PACKER.

SPECIFICATION forming part of Letters Patent No. 595,574, dated December 14, 1897.

Application filed June 24, 1897. Serial No. 642,037. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. MARTIN, a citizen of the United States of America, residing at Sturgeon, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Casing-Head Packers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in casing-head packing for oil and gas wells and the like, and has for its object to provide novel and effective means whereby the oil, gas, water, or the like will be retained within the casing and prevented from escaping while the tubing is being drawn from the well.

The invention aims to accomplish this result by means of a collar secured to the upper end of the casing and adapted to receive a cup or shell, in which is placed a packing composed of rubber or other pliable material, which entirely surrounds the portion of the tubing within the cup or shell and is adjusted firmly against the same by means of a cap passing over the tubing and cup or shell and engaging the top of the packing, so as to compress the same when the cap is forced downwardly; and to this end the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more particularly described, and specifically pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout both views, in which—

Figure 1 is a vertical sectional view of my invention. Fig. 2 is a top plan view with the tubing removed.

Referring now to the drawings by reference letters, *a* indicates the casing, which is shown passing through a portion of the floor *b* and on its upper end has screwed or otherwise secured a collar *c*, provided near its upper end with an inwardly-projecting flange *d*, which forms a seat for the base of the cup or shell *e*. This cup or shell *e* is provided with upwardly-extending screw-threaded rods *f*, which pass through apertures provided therefor in the lugs *g*, which are formed on the cap *h*, which engages over the cup or shell *e*, said cap being retained and adjusted

by means of nuts *k* on the screw-threaded rods or arms *f*.

Arranged within the cup or shell *e* is a packing *l*, which extends some distance above the top of the cup, so that the same may be compressed and forced tightly around the tubing *m*, which passes through the cap, the packing, and the base of the cup *e* in apertures provided therefor. The cup *e* is retained within the collar *c* by means of set-screws *n*, engaging through the collar above the seat *d*. When the device has been secured in position and it is desired to withdraw the tubing, the cap *h* is forced downwardly against the packing *l* by tightening the nuts *k*, which compress the pliable packing firmly against the bottom of the cup or shell *e*, which will prevent the oil, gas, or water flowing out through the packing around the tubing while the same is being withdrawn and will at the same time permit the ready withdrawal of the tubing.

When the tubing has been withdrawn, the device can be readily removed by loosening the set-screws *n*, so that the cup or shell may be readily removed from its collar and the collar unscrewed from the casing, if so desired.

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

In a casing-head packing, the combination of a collar engaging the casing, said collar being provided with a beveled internal face and provided near its upper end with an internal groove, a cup or shell resting in said groove, said cup or shell being provided with outwardly and upwardly extending screw-threaded rods carrying adjusting-nuts, a cap fitting over said cup or shell, and provided with outwardly-extending lugs engaging the screw-threaded rods carried by the said cup, a packing-ring arranged within said cup and projecting above the same and adapted to be engaged by the cap, an aperture through said packing to receive the tubing, and means carried by the collar for holding the cup in position, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN E. MARTIN.

Witnesses:

JOHN NOLAND,
THOS. M. BOYD, Jr.