J. H. LAVERS.

SPRAG.

APPLICATION FILED JUNE 28, 1912.

1,085,691. Patented Feb. 3, 1914.

FIG_1_

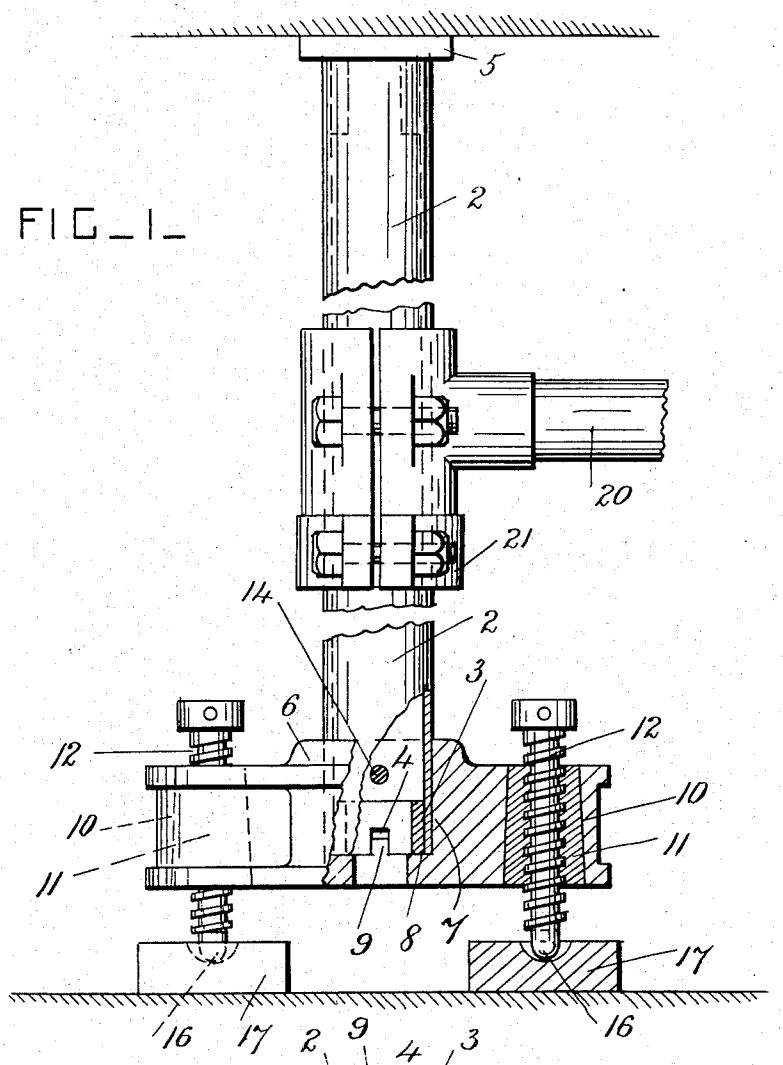
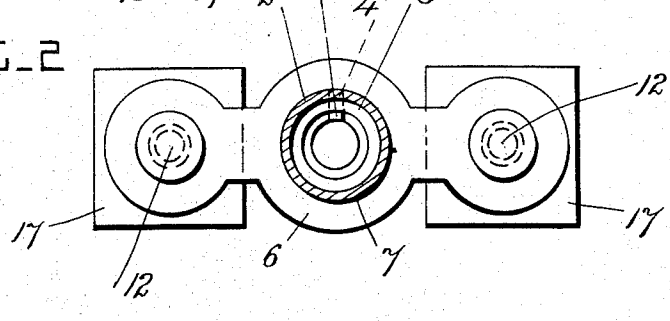


FIG_2



Witnesses

Geo. R. Lee.

W. Allen

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John H. Lavers.

By Herbert W. Jenner.

Attorney

UNITED STATES PATENT OFFICE.

JOHN H. LAVERS, OF KEARSARGE, MICHIGAN.

SPRAG.

1,085,691. Specification of Letters Patent. Patented Feb. 3, 1914.

Application filed June 28, 1912. Serial No. 706,460.

To all whom it may concern:

Be it known that I, JOHN H. LAVERS, a citizen of the United States, residing at Kearsarge, in the county of Houghton and State of Michigan, have invented certain new and useful Improvements in Sprags; 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.

This invention relates to columns used in mines, drifts and other similar places in connection with rock drills; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a front view of a column constructed according to this invention, and showing its lower part partially in section. Fig. 2 is a plan view of the jack.

The main portion of the column consists of a tubular metallic column having a reinforcing band or collar 3 secured in its lower end portion, by shrinking or otherwise. The column 2 and its band 3 have a notch 4 at their lower ends. A cap 5 is secured to the top of the column for engaging with the roof. A one piece jack 6 is provided, and this jack has a socket 7 at its middle part. This socket has a shoulder 8 at its bottom, for the bottom of the column 2 and the collar 3 to rest on, and it has a lug 9 which engages with the notch 4 so that the column cannot revolve in the socket. The end portions of the jack have tapering sockets 10 in which screwthreaded sleeves or nuts 11 are secured. Adjusting screws 12 are provided, and work in the nuts 11. Holes are provided in the socket 7 and in the column, and a pin 14 is slipped into these holes so that the column and the jack can be moved about without becoming separated. The screws 12 have hemispherical ends 16 which rest in shoes 17 which have sockets shaped to receive them. The shoes 17 rest on the floor or ground, and adapt themselves to slight irregularities of surface. The screws are tightened up until the column is secured in place. An arm 20 for supporting a rock-drill is clamped to the column 2, and this arm rests upon a collar 21 which is also clamped on the column. The collar can be set at any desired height above the ground, and the supporting arm can be turned around from time to time to suit the drill, and can be held securely in various positions as the column is prevented from revolving by the lug in its socket.

What I claim is:

In a sprag, the combination, with a base having a cylindrical socket, of a tubular column the lower end portion of which engages slidably with the said socket, a reinforcing band permanently secured to the column inside its bottom end portion and resting with it on the bottom of the socket, said parts being provided with means which normally prevent the column from revolving in the socket, and a removable retaining pin passing crosswise through holes in the column and socket.

In testimony whereof I have affixed my signature in the presence of two witnesses.

JOHN H. LAVERS.

Witnesses:
WM. J. DANIELL,
A. G. GULLBERG.