Feb. 27, 1945. M. S. MOORE 2,370,369

PICKS FOR LOADING MACHINES

Filed Feb. 10, 1943

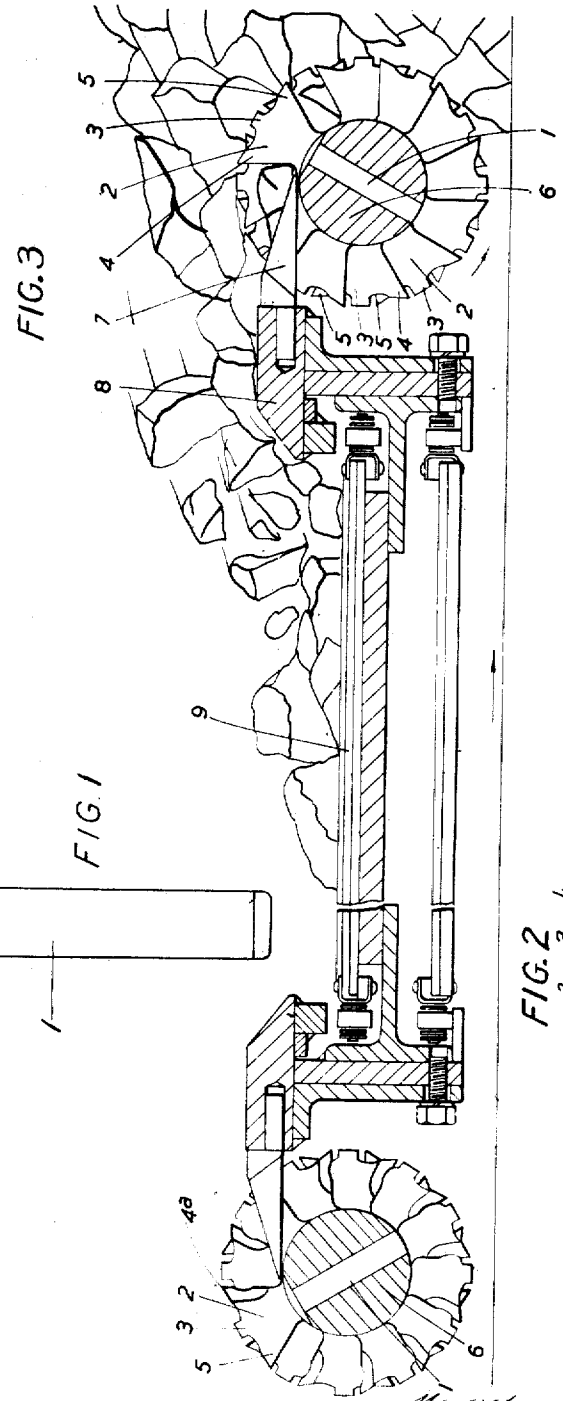


FIG. 3

FIG. 1

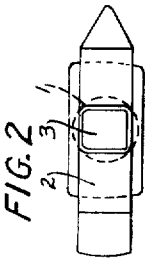


FIG. 2

Inventor

Matthew S. Moore

Attorney

Patented Feb. 27, 1945 2,370,369

UNITED STATES PATENT OFFICE

2,370,369

PICK FOR LOADING MACHINES

Matthew Smith Moore, Malvern, England, assignor of one-half to The Mining Engineering Company Limited, Worcester, England

Application February 10, 1943, Serial No. 475,426
In Great Britain February 10, 1942

4 Claims. (Cl. 198—9)

Loading machines with revolving bars preferably have removable and replaceable picks or teeth of varying formation. It is found in practice that in loosened coal, pieces may become fast or jammed and require releasing, and that the single-pointed pick cuts a path through the coal, or chips it without dislodging it.

According to the present invention, it is proposed to form two or more points or projections on the pick head in fan formation, preferably with the foremost point at no greater radial distance from the bar centre than a subsequent blunt point. Coal usually settles from the roof on being under-cut, and the formation gives it a heaving and forward rolling tendency towards the loader conveying belt. One of the points may be centrally disposed above the pick shank and may be much extended in forging to act as a chucking medium for turning the shank, being parted off to act as the contactor point for driving the pick into its position in the bar. The blunt projection preferably lies just ahead of the leading point of the adjacent pick when the picks are arranged in helical formation on the loading bar and not only ensures that the coal is dislodged but saves jamming and helps to initiate the heaving and rolling action.

In the accompanying drawing—

Fig. 1 is a side view of a pick,

Fig. 2 is an end view, and

Fig. 3 a section of a loader showing picks fitted in revolving loading bars.

Figs. 1 and 2 show a preferred form of pick with shank 1 and head 2 including the central projection 3 over the shank, forward point 4 and rear point 5. The forward point 4 is shown pick pointed at 4a. The picks are arranged in double helical formation by driving the shanks into holes drilled through the revolving loader bar 6. The loader is shown moving in the direction of the arrow with the right-hand loader bar in action, the picks passing between the teeth 7 of the comb 8 and delivering the coal onto the conveyor 9, the machine except for the loader bar being of known form.

I claim:

1. A revolving loading bar with removable and replaceable picks, said picks each comprising a shank to be driven into the loading bar and a head having a plurality of projections in fan-like formation, one of the projections having a point extending forwardly in the direction of rotation and another projection being disposed over the shank being blunt and extending further from the remote end of the shank than the said point.

2. A construction as defined in claim 1, wherein each blunt projection extends at least as far from the center of the loading bar as the point.

3. A pick for a revolving loading bar having a turned shank and a head with three projections in fan-like formation, said projections including a central blunt projection disposed over the shank and extending to a greater distance axially of the shank than either of the other two projections, one of the remaining projections forming a leading projection and having a pick point.

4. A revolving loading bar with a number of removable and replaceable picks, each including a shank driven firmly into the loading bar in helical formation, a leading point and a blunt projection extending at least as far from the center of the bar as the point, the blunt projection of one pick lying just ahead of the leading point of an adjacent pick.

MATTHEW S. MOORE.