Hand-Guard Attachment for Shovels.


To all whom it may concern:

Be it known that I, JOHN W. TANKERSLEY, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Hand-Guard Attachments for Shovels, of which the following is a specification.

This invention relates to hand shovels used in firing locomotive boilers and the like, and my object is to produce a shovel provided at the junction of the blade and handle with an upward portion to shield the hand of the operator with which he grasps the handle near the blade when shoveling coal into the furnace.

A further object is to produce a shield of the character outlined, which can be easily and quickly attached to or detached from the shovel.

With these general objects in view, the invention consists in certain novel and peculiar features of construction and combination of parts as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawing, in which—

Figure 1, is a fragmentary plan view of a coal shovel or scoop equipped with a shield embodying my invention. Fig. 2, is a view showing the rear of the shield and shovel blade in elevation and the handle in section. Fig. 3, is a side elevation of the shovel and the shield.

In the said drawing, 1 indicates the blade and 2 the handle of the shovel, the same being of any suitable type for feeding a locomotive boiler furnace or the like.

The shield 3, is of sheet metal and of substantially rectangular form with rounded upper corners, by preference, and bent slightly to conform to the curvature of the upper edge of the shovel blade. The shield is provided near its lower end with a bifurcation 4, to receive the handle of the shovel.

The bifurcation is of such depth that the shield can be fitted down over the handle until the lower edges of the former slightly overlap the edge of the rear portion of the shovel blade, the preferred construction being to fit the shield behind the rear or upturned edge of the blade as shown.

3 is a bracket riveted to the shield at its rear side and just above the bifurcation and secured to said bracket in any suitable manner or forming a part of the same, if desired, is a substantially circular spring clasp 6 terminating in diverging ends 7 to produce a flared mouth for the clasp for facilitating its engagement with the handle of the shovel, when the shield is slipped into position, the handle entering the flared mouth will snap the clasp open and that the latter will snap back to closed position and thus retain the shield against accidental upward movement with respect to the blade of the shovel.

To guard against turning or swivel movement of the shield on the handle and also to hold the shield bent to conform to the curvature of the rear or upturned portion of the blade the shield is provided at each lower corner with clamping jaws 8, each preferably consisting of a pair of spring plates riveted to and depending from the shield and bent slightly outward at their free ends as at 9, to produce flared mouths for facilitating the engagement of said jaws with the upturned portion of the shovel blade as shown.

The shield is provided with a large number of fine holes 10 through which the air can circulate and thereby enable the shield itself from becoming so hot through close exposure to heat from a furnace as to endanger the hand by which the operator grasps the handle adjacent the blade of the shovel, it being well known that it very frequently happens that firemen have their hands blistered and their gloves sometimes set on fire when firing locomotives, and this shield is intended as a protection for the hand in such services.

Most firemen are righthanded and therefore grasp the handles of their shovels with the left hands near the blades thereof. It will be noted that the shield shown extends for substantially the full width of the shovel blade at one side. Such a blade will protect the wrist and forearm as well as the hand which grasps the handle near the shovel blade. For a lefthanded man who grasps the handle at the point mentioned with his right hand, it will be preferable to provide a shield which extends to the left hand side of the blade instead of the right. Of course the shield might be made as wide as the standard shovel and have the bifurcation midway its width and thus be serviceable for either right handed or left handed firemen.

From the above description it will be apparent that I have produced a shield for coal
shovels embodying the features of advantage enumerated as desirable in the statement of the object of the invention and I wish it to be understood that I reserve the right to make all changes falling within the spirit and scope of the appended claims.

I claim:

1. A shovel provided at the rear edge of the blade with a shield rising a substantial distance above the adjacent end of the handle to protect the hand of the operator, grasping the handle near the shield.

2. A shovel provided at the rear edge of the blade with a shield rising a substantial distance above the adjacent end of the handle to protect the hand of the operator, grasping the handle near the shield; said shield having small perforations through which air is free to circulate.

3. A shovel provided at the rear edge of the blade with a shield rising a substantial distance above the adjacent end of the handle to protect the hand of the operator, grasping the handle near the shield; and means for detachably securing the shield in position.

4. A shovel provided at the rear edge of the blade with a shield rising a substantial distance above the adjacent end of the handle to protect the hand of the operator, grasping the handle near the shield, a clasp secured to the shield and detachably engaging the handle, and clamping jaws carried by the shield and engaged with the rear edge of the shovel blade.

5. The combination with a shovel of a shield, fitting against and projecting upward from the rear end of the shovel blade and provided with a bifurcation through which the handle of the shovel extends, a spring clasp secured to the shield at its rear side and firmly clasping the handle, and spring jaws secured to the shield at its lower corners, each set of jaws gripping the rear edge of the blade.

JOHN W. TANKERSLEY.