This invention relates to an improved repair point for plow shares of the type adapted to be welded in place, the worn point having been previously removed, and means for more easily and accurately aligning the point with the share portion to which it is attached.

The object of my invention is to provide improvement in repair points adapted to be applied to plow shares by welding, in the nature of what I shall term a clearance gage to be either formed as an integral part of the point or applied as an attachment, which will assure the operator or the party applying the point the proper amount of clearance between the back end of the repair point and a straight line connecting the underside of the forward end of the point and the heel of the landside of the share, to produce the proper draft in the share at the time the point is being applied to the share, without guessing, measuring or the use of jigs, as heretofore has been the practice.

My invention consists in the construction, arrangement and combination of the various parts of the device whereby the objects contemplated and attained as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of my improved plow point and gage.

Figure 2 is a bottom view of Figure 1.

Figure 3 is a side elevation of a plow share from which its worn point has been previously removed, showing the manner that my improved repair point is mounted in position for welding.

Figure 4 is a perspective view of Figure 3.

Figure 5 is an inverted perspective view of a slightly modified form of my invention with the clearance gage detached.

Figure 6 illustrates a modified form of Figure 5.

Referring to the drawings the numeral 10 indicates the landside of the plow share 11 in which the worn point has been removed, about four inches from the pointed end, by cutting the share and landside at right angles to said landside, either with a cutting torch or otherwise. By thus removing the point a portion of the landside is removed. The point thus removed is replaced with a new point 12 usually in the form of a drop forging of suitable steel, or iron, and comprises a blade 13 having a landside portion 14, the inclined pointed end 15 and the back 16. The back edge is preferably beveled and adapted to be joined to the forward end of the plow share 11 by welding, the beveled end of the point serving to form a groove 18 for receiving the welding material. Before the welding material is applied it is necessary to align the back end of the point with the forward end of the share so that the lower edge of the landside portion 14 is inclined downwardly and forwardly with relation to the lower edge of the landside 16 in order to give the share the proper draft, or tendency for the share to enter the ground as the share is advanced. In order to accomplish the adjustment of the point relative to the share 16 has been herefore the practice to prop the adjoining ends up with wedges or blocks to give the desired inclination to the repair point, after having placed the parts on a surface plate 19, the height of the adjoining end from the plate being about one fourth inch for points of four inches in length, however this height varies with points of different lengths and shapes so that a considerable amount of measuring and adjusting is necessary to obtain the proper alignment. In order to overcome this difficulty I have formed on the underside of the back end of the landside portion 14 a lug 20 of the proper height to give the desired inclination for the plow point to which the lug is secured, this lug 1 shall term a clearance gage in as much as it automatically provides the proper clearance between the surface plate and the under surface of the junction of the point and the share at the time the back end of the point 12 is placed against the forward end of the plow share, the forward end being propped up by a block 24 so that the top surface of the plow point and the share are in alignment, regardless of whether or not the under side of said parts are in alignment, the parts may then be fixed together by electric welding.

After the groove 18 has been filled with welding material the lug 20 may be removed by the welding are, and when placed near the groove 18 it may be flowed into said groove, or it may be removed by a cutting torch or otherwise.

Numerous ways of forming the clearance gage without departing from the spirit of my invention may be provided as illustrated in Figures 5 and 6 which are modified forms of my invention. In Figure 5 instead of forming the gage as an integral part of the plow point I have formed in the back end of the member 14 a hole 21 for receiving a threaded lug, or gage, 23 which when screwed in position serves the same purpose as the lug 20, it has the advantage of providing lugs of various lengths, or heights, as required for various types of plow shares for a given plow point. In Figure 6 the lug 23 is placed between the pointed end and the heel of the landside portion,
as a matter of variation. The lugs 22 and 23 may be removed after the weld has been made and used over a number of times, if so desired the lugs may be made in standard lengths.

Thus it will be seen that I have provided an improved clearance gage that may be either formed as an integral part of the point or as a detachable member, in either case means is provided whereby the gaging, or spacing of the back end of the plow point above the plate 19 may be accomplished automatically to give the desired clearance.

I claim:

1. An attachable repair point for plow shares adapted to be fixed to the cut-off forward ends of a worn plow share by welding, comprising a body including a shear portion and a landside portion, a clearance gage, and means for securing the gage to the under surface of said landside portion to automatically provide the proper amount of clearance between the repair point and the share as they are placed in welding position on suitable surface plate.

2. An attachable repair point for plow shares adapted to be fixed to the cut-off forward end of a plow share by welding, comprising a body including a shear portion and a landside portion having a lug depending from its under surface to act as a temporal clearance gage to automatically provide the proper amount of clearance between the repair point and the share as they are placed in welding position on a suitable surface plate.

3. An attachable repair point for plow shares, adapted to be fixed to the cut-off forward end of a worn plow share by welding comprising, a body including a share portion and a landside portion, a clearance gage depending from said landside portion of such height as to automatically provide the proper amount of clearance between the adjoining ends of said point and share, and a surface plate extending beneath the front end of the point and the under side of the back end of the landside, as the parts are placed in position to be permanently secured together.

4. The combination of a plow share from which its worn point has been removed on a line transversely of its line of advance, and a repair point having its back edge shaped to fit the severed edge of said share and adapted to be fixed thereto by welding; the under surface of the back edge of said repair point being provided with a lug depending therefrom to serve as a temporary clearance gage.

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No references cited.