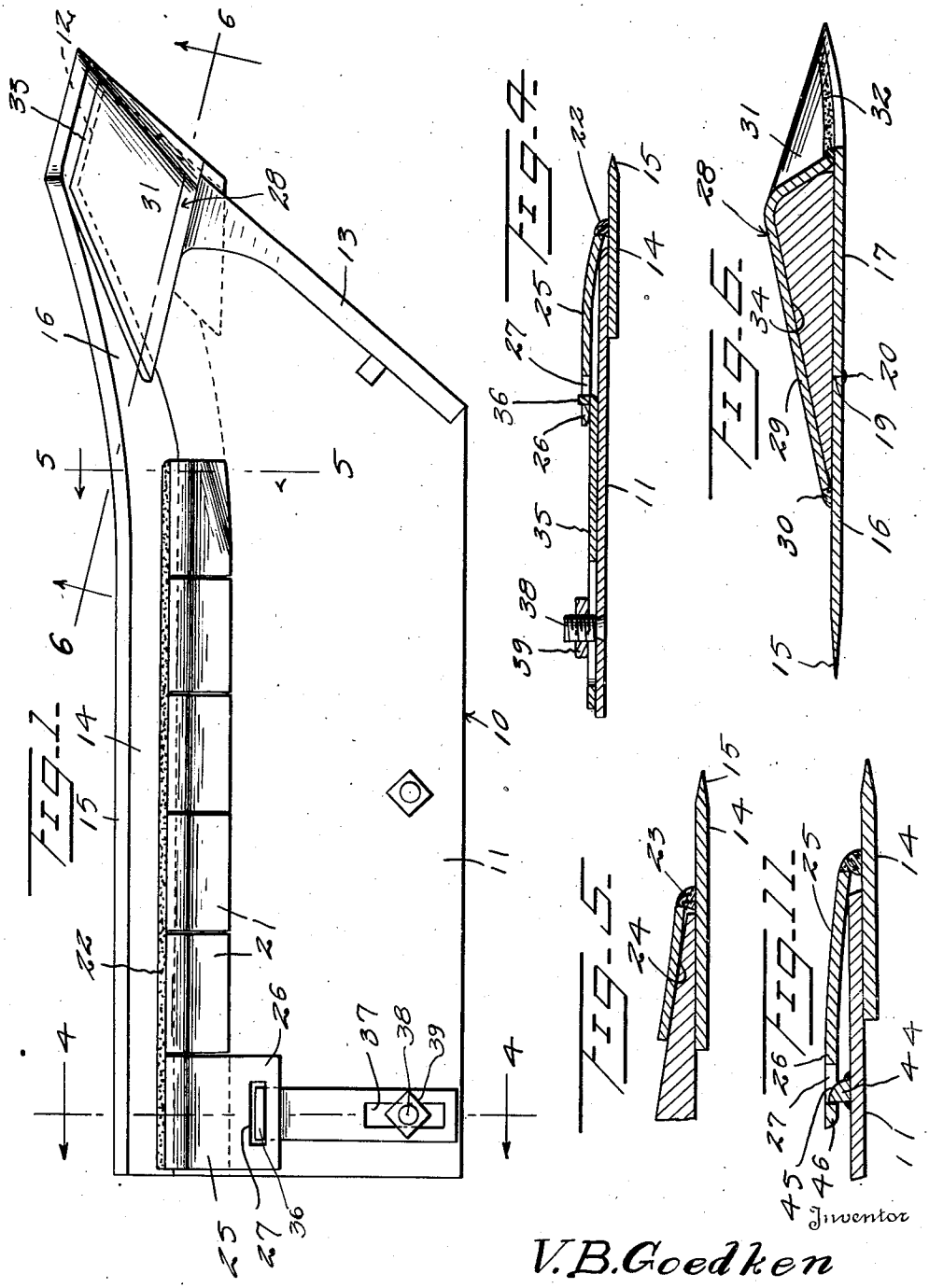
Nov. 25, 1947. V. B. GOEDKEN 2,431,639

INTERLOCKING RECONDITIONING BLADE FOR PLOWSHARES

Filed March 23, 1945 2 Sheets-Sheet 1



Inventor

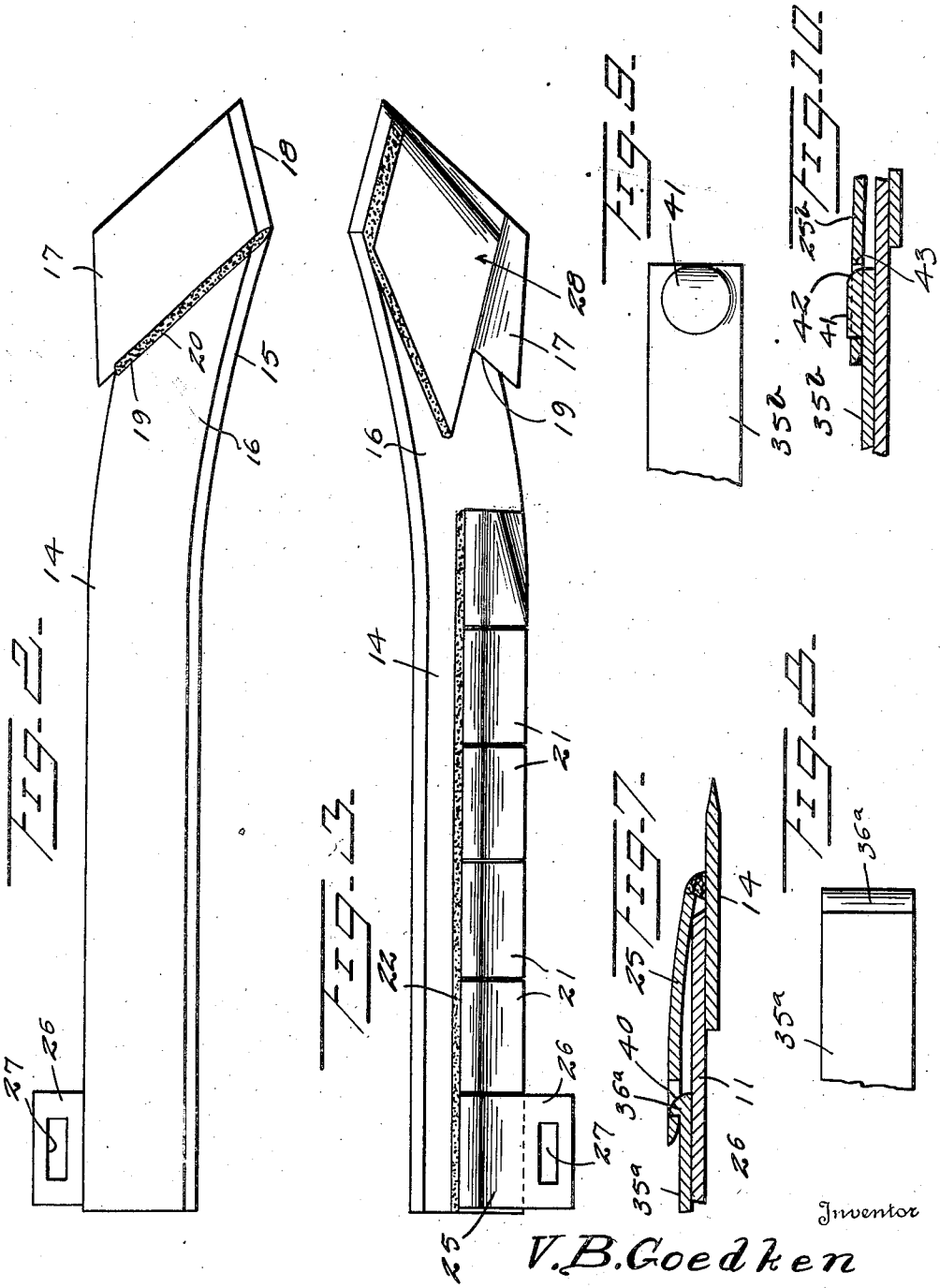
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INTERLOCKING RECONDITIONING BLADE FOR PLOWSHARES

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2,431,639

INTERLOCKING RECONDITIONING BLADE FOR PLOWSHARES

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1 Claim. (Cl. 97—125)

1

This invention relates to an attachable cutting edge and point for a plow blade.

An object of this invention is to provide an attachable blade construction for a plow, so that the worn edge and point of the plow may be easily renewed so as to renew the plow blade.

Another object of this invention is to provide a plow blade attachment which can be applied to a plow with ordinary tools. A further object of this invention is to provide a plow blade attachment which includes an elongated narrow blade which is formed with a pocket on the rear side thereof, and a point which is also formed with a pocket in which the correlated parts of the worn plow are adapted to seat, the attachment being secured to the plow by means of an adjustable securing means so that the device may be applied without shaping the plow blade.

To the foregoing objects and others which may hereinafter more fully appear, the invention consists of the novel construction, combination and arrangement of parts, as will be more specifically referred to and illustrated in the accompanying drawings, but it is to be understood that changes, variations, and modifications may be resorted to which fall within the scope of the invention as claimed.

In the drawings:

Figure 1 is a detail bottom plan of a plow blade, having mounted thereon a renewable blade and point construction according to this invention.

Figure 2 is a detail side elevation of the front side of the attachment.

Figure 3 is a detail side elevation of the rear side of the device.

Figure 4 is a sectional view taken on the line 4—4 of the Figure 1.

Figure 5 is a fragmentary sectional view taken on the line 5—5 of Figure 1.

Figure 6 is a sectional view taken on the line 6—6 of Figure 1.

Figure 7 is a fragmentary sectional view similar to Figure 4, showing a modified form of holding means for the device.

Figure 8 is a fragmentary plan view of the holding member.

Figure 9 is a fragmentary plan view of another modification of holding member.

Figure 10 is a fragmentary sectional view similar to Figure 4, showing the holding member of Figure 9 in applied position.

Figure 11 is a fragmentary sectional view similar to Figure 4, showing another modification of this invention.

Referring to the drawings, the numeral 10 designates generally a plow construction, including a blade 11 formed with a point 12 and a landside 13. The plow 10 when worn is adapted to have mounted on the cutting edge of the blade 11 and the point 12 a renewable blade and point attachment, which includes an elongated blade member 14 formed with a keen edge 15. The blade member 14 is longitudinally bent, as at 16, in the region of the point 12 of the plow, and a point forming plate 17, having a keen edge 18, is secured to the bevelled forward end 19 of the blade 14 by means of welding 20, or the like.

2

In order to provide a means whereby the blade 14 and the point forming plate 17 may be attached to the plow 10, I have provided a plurality of pocket forming plates 21, which are welded as at 22, to the rear side of the blade 14. There are a series of these pocket forming plates 21 disposed in substantially end abutting relation, and these plates 21 are bent, as at 23, so that the body of each plate 21 will be offset from the adjacent face of the blade 14 in order to form a plow blade receiving pocket 24.

A rear pocket forming plate 25 is also welded to the rear side of the blade 14, forming a continuation of the pocket forming plates 21, but plate 25 is of greater length than the plates 21, so that the upper end of plate 25 will extend above the upper edges of the plates 21, as indicated at 26. The extension 26 is formed with an opening 27 within which a locking key or securing member, as will be hereinafter described, is adapted to engage. The forward end or bent portion 16 of the plate 14, and the rear side of the point forming plate 17, has secured thereto a pocket forming member generally designated as 28. The pocket forming member 28 comprises a plate 29, which is welded, as at 30, to the rear side of the blade extension 16 and the plate 29 has formed integral therewith an obtusely disposed landside wall 31, which is welded, as at 32, to the rear side of the point forming plate 17.

The point forming pocket 28 is shaped at its forward end or edge, as indicated at 33, in conformity with the forward edge of the point forming plate 17. The point 12 is adapted to snugly seat within the pocket 34 formed by the pocket forming member 28 with the landside extension 31 engaging the forward portion of the landside 13 of the plow.

In order to provide a means whereby the blade 14 and the point 17 may be firmly secured and held on the plow 10, I have provided a securing means which includes an elongated bar or strap 35, which is provided at its lower forward end

with a substantially right angularly bent key 36, which is engageable in the slot or opening 27. The bar or strap 35 is provided with a longitudinally extending opening 37 adjacent the upper or rear portion thereof through which a threaded bolt 38, which is carried by the plow blade member 11, is adapted to engage. The bar or strap 35 is firmly secured in adjusted position relative to the bolt 38 by means of a nut 39. In applying the attachment to the plow, the locking key 36 of the bar or strap 35 may be initially inserted in the opening 27 of the plate extension 26, and the blade member 11 then inserted in the pocket formed by the plates 21 and 25. The plate 25 is bent in the direction of the blade 14, so that when blade 11 is within the pocket, securing bar or strap 35 will be tightly held against the adjacent rear side of the blade member 11, and key 36 will be held within the slot 27.

Referring now to Figures 7 and 8, there is disclosed a slightly modified form of renewable blade securing means wherein an elongated slotted strap 35^a is formed with a key 36^a at its forward or lower end, and the forward or lower side of the key 36^a is rounded or bevelled, as indicated at 40. By providing the rounded lower portion of the key 36^a this key may in certain instances be forced between the extension 26 and the adjacent side of the plow blade member 11.

Referring to Figures 9 and 10, there is disclosed another modification of this invention wherein the securing or holding strap or bar 35^b has secured to the lower or forward portion thereof a stud 41, which is circular or round in plan, and is provided with a bevelled or rounded lower portion 42. In the present instance the pocket forming plate 25^b is formed with a circular opening 43 within which the stud 42 is adapted to engage. In other respects the remaining structure of the attachment for use with the modified forms in Figures 7 to 10 is similar in detail to the structure shown in Figures 1 to 6.

In the use of this attachment the lower edge of the plow blade member 11 and the worn point 12 thereof are inserted in the pockets 24 and 34, respectively. The securing or holding member formed by the strap 35 and the key 36 is inserted in the opening or keeper 27, whereupon the attachment may be forced over correlated portions of the plow blade and point. The securing member 35 is then locked in its adjusted position by tightening of the nut 39 on the bolt shank 38.

Inasmuch as the pocket forming member 28, which engages the point 12 of the plow, is disposed on an angle to the blade member 11, an additional securing means for the forward end of the blade 14 and the point member 17 is not necessary. In other words, the securing strap 35 will firmly hold the blade 14 and the point 17 onto the plow, so that the attachment will not become loosened during the normal use of the plow.

Referring now to Figure 11, there is disclosed

a modified form of locking means for locking the blade 14 on the plowshare 11. In this form the plate 25, having the keeper opening 27, is adapted to engage over a locking lip 44, which is welded to the forward face of the plowshare, or blade, 11. The lip 44 is provided with a rounded lower side 45, so that the extension 26, carried by the plate 25 and formed with a rounded upper edge portion 46, may readily be moved upwardly and over the locking member 44. The extension 26 and the plate 25 are adapted during the mounting of the extension on the locking member 44 to spring outwardly a slight degree and then snap back into locking position, which is the position shown in Figure 11.

The exact configuration illustrated is regarded as the optimum, but some of the desirable results inherent in this disclosure may be obtained by various slight modifications including some departure from the exact configuration shown, and it is therefore requested that the scope of the invention should be regarded as limited only by the terms of the claim.

What is claimed is:

A renewable plow blade and points comprising an elongated narrow blade, a point member carried by the forward end of said blade, a pocket forming member carried by the rear side of said point member, a plurality of edge abutting pocket forming members carried by the rear side of said blade upwardly from the lower edge thereof, the rearmost of said plates extending above the upper edge of the remaining plates and formed with a keeper opening, a threaded stud fixed to the plow blade above said rear plate, an elongated locking bar formed with an elongated opening through which said stud loosely extends, a key carried by the lower end of said locking bar engageable in said keeper opening, and a nut threaded onto said stud for clamping said bar relative to the plow blade to thereby hold the plow blade and point in said pocket forming members with said narrow blade and point member overlapping the plow blade and point respectively.

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