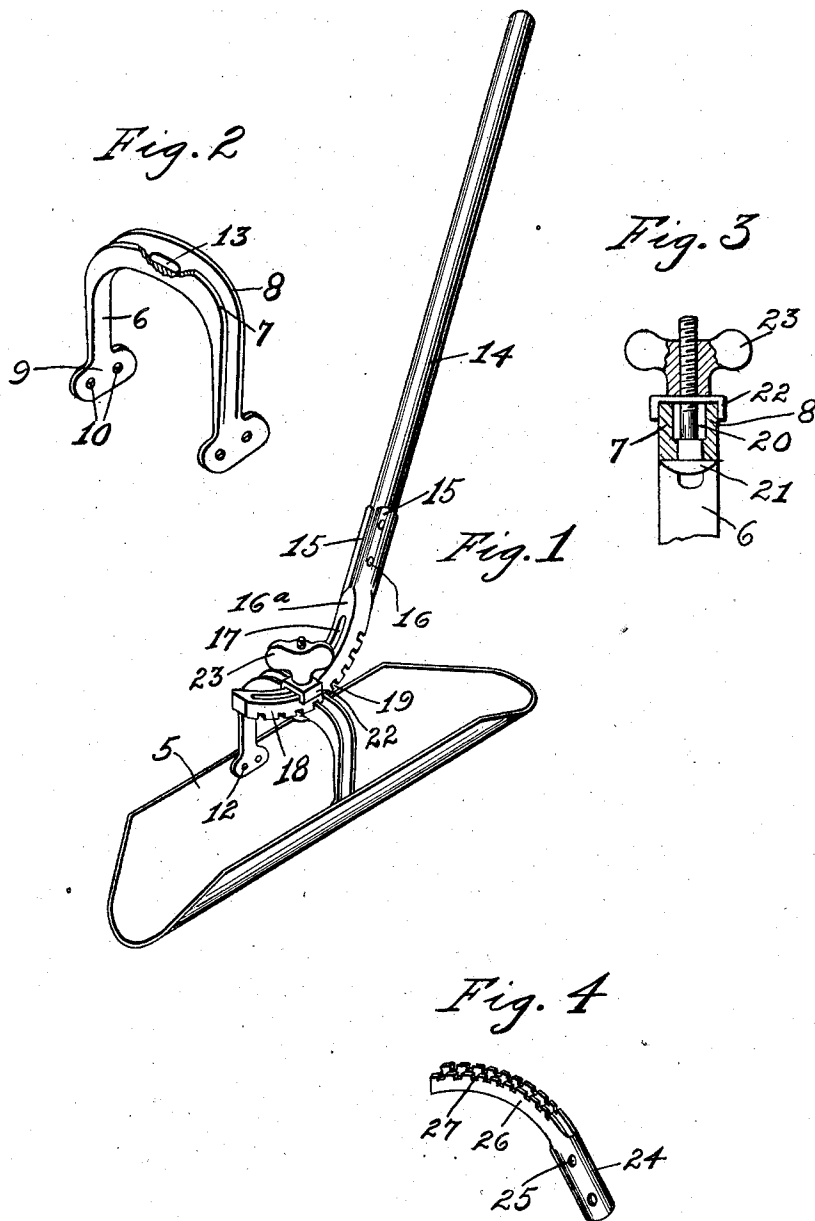


F. J. VONDRACEK.
TILING SPADE.
APPLICATION FILED DEC. 28, 1909.

963,668.

Patented July 5, 1910.



Witnesses

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FRANK J. VONDRACEK, OF CEDAR RAPIDS, IOWA.

TILING-SPADE.

963,668.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK J. VONDRACEK, a citizen of the United States of America, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Tiling-Spades, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a tiling spade and the object thereof is to provide a spade of such class in a manner as hereinafter set forth and claimed with a handle that can be angularly and laterally adjusted, without the aid of a wrench or other tool, and when adjusted will be held perfectly rigid in position.

Further objects of the invention are to provide a tiling spade which shall be comparatively simple in its construction and arrangement, strong, durable, efficient in its use and inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists of the novel construction, combination and arrangement of parts as hereinafter more specifically described and illustrated in the accompanying drawings, wherein is shown the preferred embodiment of the invention, but it is to be understood that changes, variations and modifications can be resorted to which come within the scope of the claims hereunto appended.

In the drawings wherein like reference characters denote corresponding parts throughout the several views: Figure 1 is a perspective view of a tiling spade in accordance with this invention. Fig. 2 is a perspective view of the handle supporting yoke. Fig. 3 is a sectional detail of the device illustrating a means for clamping an adjustable handle socket to the yoke, and, Fig. 4 is a perspective view illustrating a modification of the handle socket.

Referring to the drawings in detail, 5 denotes a semi-cylindrical blade having fixed to its upper face, and approximately centrally thereof a vertically-disposed supporting yoke consisting of a body-portion 6 with which is formed integral a pair of outwardly-extending spaced flanges indicated by the reference characters 7 and 8. The body-portion 6 is of inverted U-shape and has each of its ends provided with a flat extension 9 having openings 10. The

extensions 9 are positioned against the inner face of the blade 5 and through the openings 10 extend hold-fast devices such as rivets as at 12 for fixedly securing the yoke to the blade 5. The top of the body-portion 6 is provided with an oval-shaped slot 13 for a purpose to be presently referred to.

Referring to Fig. 1, the handle of the spade is indicated by the reference character 14 and which has its lower end extending into a socket formed by a pair of semi-cylindrical members 15 which embrace the handle 14 and through the said members 15 as well as the handle 14 project hold-fast devices 16 whereby the handle is fixedly secured to the members 15. These latter form an element of what may be termed an adjustable handle socket forming device consisting of a quadrant shaped body-portion 16^a slotted as at 17 and having a pair of right-angular extensions 18 which terminate at one end in the members 15. The lower edges of the extensions 18 are notched as at 19, the notches of one of the extensions 18 opposing the notches of the other extension and the notches of each extension are spaced apart a sufficient distance so that pairs of notches forming a perfect rigid connection will receive the flanges 7 and 8. The body-portion 16^a is of segment-shape and the extensions 18 conform in contour to the shape of the body-portion 16^a and owing to the providing of the notches in the extensions 18, it is evident that the handle 14 can be adjusted to extend at various angles with respect to the vertically-disposed supporting yoke. The handle 14 is maintained in its adjusted position through the medium of a coupling device consisting of a threaded bolt 20 having its lower end formed with an enlarged head 21, the bolt 20 extends through the opening 13 and the head 21 is adapted to engage the inner face of the body-portion 6 of the supporting yoke. Mounted upon the bolt 20 and above the supporting yoke is a flanged clamping member 22 which is adapted to straddle the body portion 16^a in a manner as shown in Fig. 1. The clamping member 22 is maintained in position by a thumb-nut 23 which is mounted upon the threaded end of the bolt 20 and engages the clamping member 22. When the nut 23 is screwed tightly against the clamping member 22 the extensions 18 are maintained in

their adjusted position. The opening 13 provides means whereby the handle may be adjusted to one side or the other or in other words a lateral adjustment of the handle can
5 be had with respect to the blade.

In Fig. 4 is illustrated a modified form of an adjustable handle socket forming device and which consists of a sleeve 24 forming a socket for the reception of a handle 14 and
10 which is provided with openings 25 through which can extend hold-fast devices for fixedly securing the handle to the sleeve 24. The latter has projecting from one end thereof a pair of quadrant shaped spaced
15 arms 26 each of which is formed on one edge with spaced notches 27 of an arrangement similar to the notches 19. The arms 26 perform the same function as the extensions 18.

20 What I claim is:—

1. A tiling spade comprising a blade, a vertically-disposed supporting yoke fixed to said blade and provided with a pair of flanges, a handle, an adjustable quadrant-shaped member provided with a pair of
25 right-angularly disposed toothed extensions engaging said flanges, means for coupling said member to the handle, and means extending through the yoke and engaging said member for fixing it in its adjusted position.

2. A tiling spade comprising a blade, a vertically disposed supporting yoke fixed to said blade and provided with a pair of flanges and further having a slot, a later-
35 ally and longitudinally adjustable quadrant-shaped toothed member seated upon the yoke and straddling said flanges, a handle connected to said member, and means extending through said slot and said member and en-
40 gaging the member for fixing it in its adjusted position.

3. A tiling spade comprising a blade, a vertically-disposed supporting yoke fixed to said blade, a laterally and angularly adjust-
45 able handle positioning member mounted upon and engaging with said yoke, means extending through the yoke and engaging the said member for fixing it in its adjusted position, and a handle connected to the mem-
50 ber.

4. A tiling spade comprising a blade, a vertically-disposed supporting yoke fixed to said blade, a laterally and angularly-adjust-
55 able quadrant-shaped handle positioning member mounted upon said yoke, means engaging with said member for fixing it in its

adjusted position, and a handle connected to the member.

5. A tiling spade comprising a blade, a vertically disposed supporting yoke fixed to
60 said blade and provided with a pair of flanges, a toothed quadrant-shaped handle positioning member seated upon the yoke and straddling said flanges and capable of longitudinal and lateral adjustment, means
65 extending through the yoke and member and engaging with the member for fixing the latter in its adjusted position, and a handle connected to said member.

6. A tiling spade comprising a blade, a
70 vertically-disposed supporting yoke fixed to said blade and provided with a pair of flanges, a handle adjusting member formed with two sets of teeth and capable of longitudinal and lateral adjustment, said member
75 seated upon said yoke and straddling said flanges, a handle connected to said member, and means extending through the yoke and the member and engaging the member for fixing it in its adjusted position.

7. A tiling spade comprising a blade, a
80 vertically-disposed supporting yoke connected to said blade and provided with a pair of flanges and further provided with a slot extending transversely with respect to the blade, a toothed handle adjusting mem-
85 ber capable of adjustment laterally and longitudinally with respect to the blade, said member seated upon said yoke and straddling said flanges, means extending through
90 the yoke and member and engaging with the member for maintaining it in its adjusted position, and a handle connected to the member.

8. A tiling spade comprising a blade, a
95 vertically-disposed supporting yoke fixed thereto and having a slot extending transversely with respect to the blade, a quadrant-shaped toothed adjusting member mounted upon and engaging with said yoke
100 and capable of lateral and longitudinal adjustment with respect to the blades, means extending through the yoke and member and engaging with the member for fixing it in its adjusted position, and a handle connected
105 to the member.

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

FRANK J. VONDRACEK.

Witnesses:

EDITH R. CONN,
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