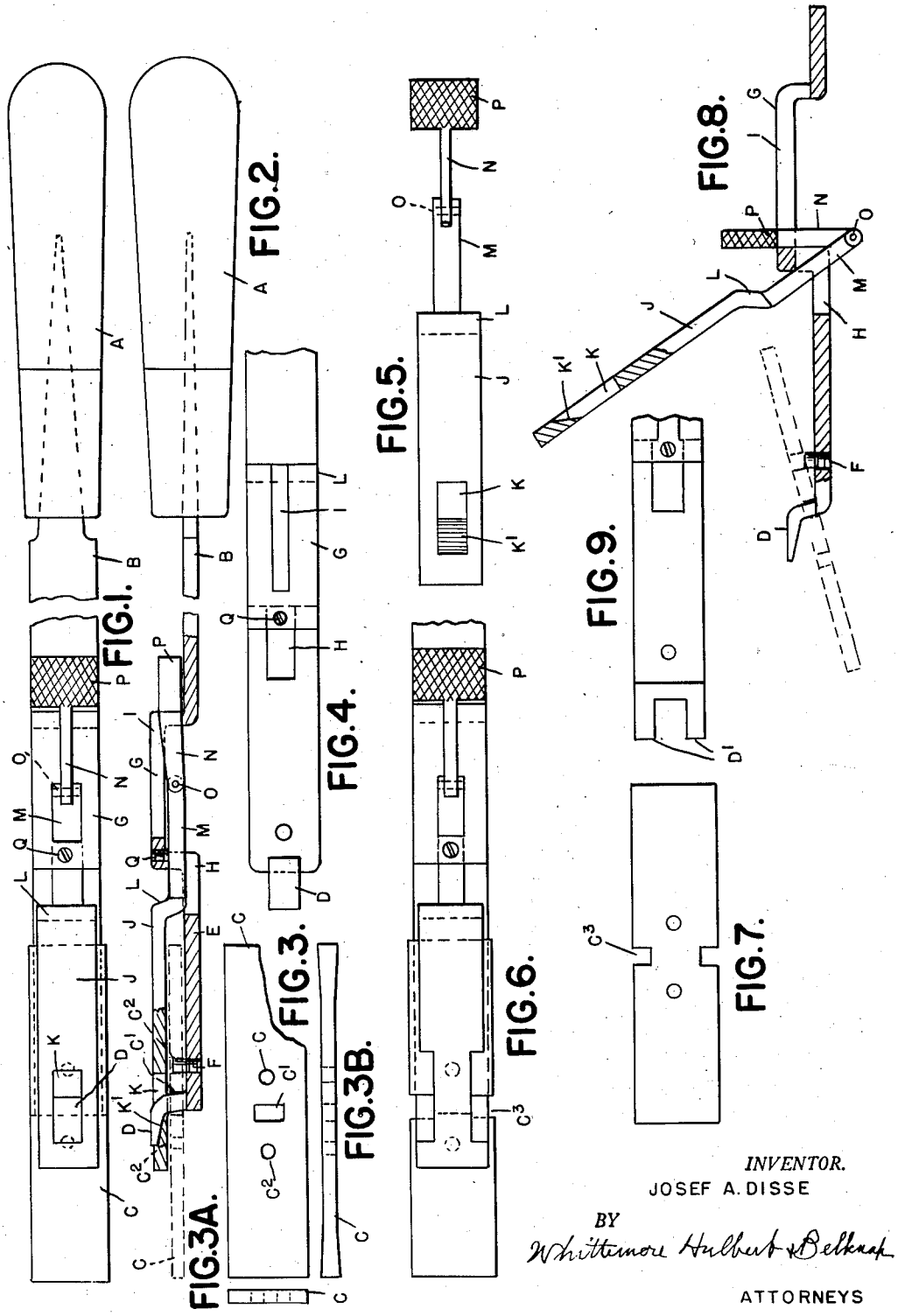
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SCRAPER

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SCRAPER

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The invention relates to scrapers of that type in which a renewable scraper blade or tool is detachably secured to a permanent handle.

It is the object of the invention to obtain a simple construction of the renewable blade and the securing means therefor which will hold the blade in rigid relation to the handle while in use but will permit of quick detachment. To this end the invention consists in the construction as hereinafter set forth.

In the drawing:

Fig. 1 is a plan view of my improved scraper;

Fig. 2 is a central longitudinal section through a portion of the shank and the blade attaching means;

Fig. 3 is a plan view of the blade;

Fig. 3A is an end elevation of Fig. 3;

Fig. 3B is a side elevation partly in section of Fig. 3;

Fig. 4 is a plan view of a portion of the shank with the blade and clamping means detached;

Fig. 5 is a view of the clamping means detached;

Fig. 6 is a plan view similar to Fig. 1 showing a modified construction;

Fig. 7 is a plan view of the blade of the modified construction;

Fig. 8 is a longitudinal section showing the manner of engaging the blade with the shank and clamping means; and

Fig. 9 is a plan view of a portion of the construction shown in Fig. 6.

A is a suitable handle and B a forwardly extending shank secured to said handle. C is the attachable blade which is a substantially flat, oblong and rectangular piece of high-grade metal suitable for forming the scraping edge. The top and bottom faces of this tool are not, however, in exact planes as the longitudinal section tapers slightly from the opposite ends towards the center. This taper, preferably from 1° to 3°, may be formed by arcuate curves and the center of the blade is thus somewhat thinner than the end portions. At the center there is an oblong rectangular transversely extending aperture C′ and equally spaced on opposite sides of this aperture, circular apertures C^2.

The shank B is provided at its forward end with an upwardly and forwardly projecting finger D which is adapted to be inserted through the aperture C′ in the blade. Immediately in rear of this finger is a portion E of the shank which will be overlapped by the rear portion of the blade and a pin F projecting from the portion E engages one of the circular apertures C^2 in the blade. In rear of the portion E is an upwardly offset portion G. A slot H extends centrally through the forward end of the offset and forward thereof in the portion E. There is also a slot I extending centrally and longitudinally of the portion G through the rear end thereof. J is a clamping and securing member for the blade which near its forward end has an aperture K therethrough for the passage of the finger D. There is also an inclined end portion K′ forward of the aperture K for engaging a correspondingly incline in the tapered end of the finger D. The rear end of the member J is downwardly offset at L and is provided with a rearwardly extending shank M adapted to pass through the aperture H and beneath the offset portion G. N is a lever member pivoted at O to the rear end of the shank M and having at its rear end a finger piece P for engagement with the rear end of the portion G.

With the construction as above described, to assemble the parts the shank M of the member J is first passed through the slot H and the lever N is passed through the slot I after which the pin O pivotally connects these members to each other. The blade C is then engaged with the finger D with the rear portion of said blade lying upon the portion E. The member J is then turned down to overlap the rear end of the blade and to engage the incline K′ with the tapered end of the finger D. Finally the lever N is turned down to engage the finger piece P with the rear end of the offset portion G which will lock the member J from forward movement. In such position the blade C is rigidly secured to the handle for the finger D in cooperation with the incline K′ will force the forward end of the member J in close contact with the blade. Also the shank M in cooperation with the offset portion G will hold down the rear end of the member J while the finger piece P in cooperation with the rear end of the portion G will prevent any forward displacement of the member J. The blade is further held from any lateral movement by the pin F engaging the aperture C^2. I also preferably provide a set screw Q in the offset portion G for tightening against the shank M and taking up any clearance between the same and said offset portion. Thus, in use the scraper blade is as rigidly held in position as if it were an integral portion of the handle shank. However, whenever the blade is to be sharpened, it may be quickly disengaged from the handle shank and at any time it may be reversed in position to use the opposite end for scraping. The

tapering of the longitudinal section of the blade from the ends to the center is of value as this avoids the necessity in sharpening or grinding the face of the blade, it being only necessary to grind the end thereof. The blade may be used until all of the portion at either end thereof which projects forward of the member J has been ground away.

The construction illustrated in Figs. 6 and 7 is similar to that above described with the exception that instead of forming a central aperture C' in the blade, recesses C^3 are formed in the opposite side of the blade, and instead of a single finger D, a pair of fingers D' are formed on the member J to engage said recesses.

What I claim as my invention is:

1. A scraper comprising a handle provided with a forwardly extending shank, a substantially flat blade reversible end for end having an aperture through the central portion thereof and apertures equispaced forward and in rear of said central aperture, a finger at the forward end of said shank adapted for insertion through said central aperture to overlap the portion of the blade forward thereof, the rear portion of the blade overlapping said shank, a pin projecting from said shank to engage the spaced aperture in the overlapping portion of the blade, and clamping means for securing said blade to said shank including a wedge portion for insertion between said finger and blade and a portion bearing on the rear end of said blade.

2. A scraper comprising a handle provided with a forwardly extending shank, a substantially flat blade reversible end for end having an aperture through the central portion thereof, a finger projecting upwardly and forwardly from the forward end of said shank adapted for insertion through said aperture to overlap the forward portion of the blade, a clamping member also apertured for the passage of said finger therethrough and having a wedge-shaped portion for insertion between said finger and blade, and means engaging the rear end of said clamping member for drawing the same rearward to engage said wedge portion with said finger and to lock said rear portion to said shank.

3. A scraper comprising a handle provided with a forwardly extending shank, a substantially flat blade reversible end for end having an aperture through the central portion thereof, a finger extending upward and forward from the forward end of said shank adapted for insertion through said aperture to extend over the forward portion of the blade, an offset portion in said shank apertured through its forward and rear ends, a clamping member apertured for the passage of said finger therethrough and having a wedge portion for engaging beneath said finger the rear end portion of said clamping member extending through the forward aperture in the offset portion of said blade, and a locking member connected to the rear end of said clamping member and extending through the rear aperture in said offset portion being adapted to hold said wedge portion in engagement with said finger.

4. A scraper comprising a handle provided with a forwardly extending shank, a substantially flat blade reversible end for end, said blade being of a longitudinal section slightly tapered from its opposite ends towards the center and provided with an aperture through the central portion thereof, a finger projecting upward and forward from the forward end of said shank adapted for insertion through said aperture to extend over the forward portion of the blade, and clamping means having a wedge portion for insertion between said finger and blade and a rear portion having a locking engagement with said shank.

5. A scraper comprising a handle provided with a forwardly extending shank, a blade centrally apertured, a finger projecting upward and forward from the forward portion of said shank adapted for insertion through said aperture to extend over the forward portion of the blade when the rear portion thereof overlaps said shank, an offset portion in said shank in rear of the portion overlapped by said blade having an aperture through its forward end and a longitudinal slot extending through the rear end, a clamping member apertured for the passage of said finger therethrough and having a wedge portion for engagement between said finger and blade, the rear end of said clamping member extending through the forward aperture in said offset portion, a locking member pivotally secured to the rear end of said clamping member extending through the slot in said offset portion and having a finger piece of greater width at its outer end for engaging the rear end of said offset portion whereby said clamping member may be released from said finger for the engagement or removal of said blade and in its locked position will draw said wedge portion beneath said finger with its rear portion beneath said offset portion to rigidly hold said blade to the shank.

6. A scraper comprising a handle provided with a forwardly extending shank, a blade having central notches in its opposite sides, a pair of fingers projected from the forward end of said shank for insertion through said notches to extend over the forward portion of said blade when the rear portion thereof lies in contact with said shank, an offset portion in said shank in rear of the portion overlapped by said blade having an aperture through its forward end and a longitudinal slot extending through the rear end thereof, a clamping member having a portion for extending between said fingers, a wedge portion in advance thereof for engagement beneath said fingers, an inwardly offset portion for extending through the forward aperture in the offset portion of said shank and beneath the latter, and a locking member pivotally connected to the rear end of the clamping member and extending through the longitudinal slot in said offset portion being provided with the finger piece at its outer end whereby the engagement of said finger piece with the rear end of said offset portion will draw said wedge portion beneath said fingers and will hold the rear portion of said blade in engagement with said shank.

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