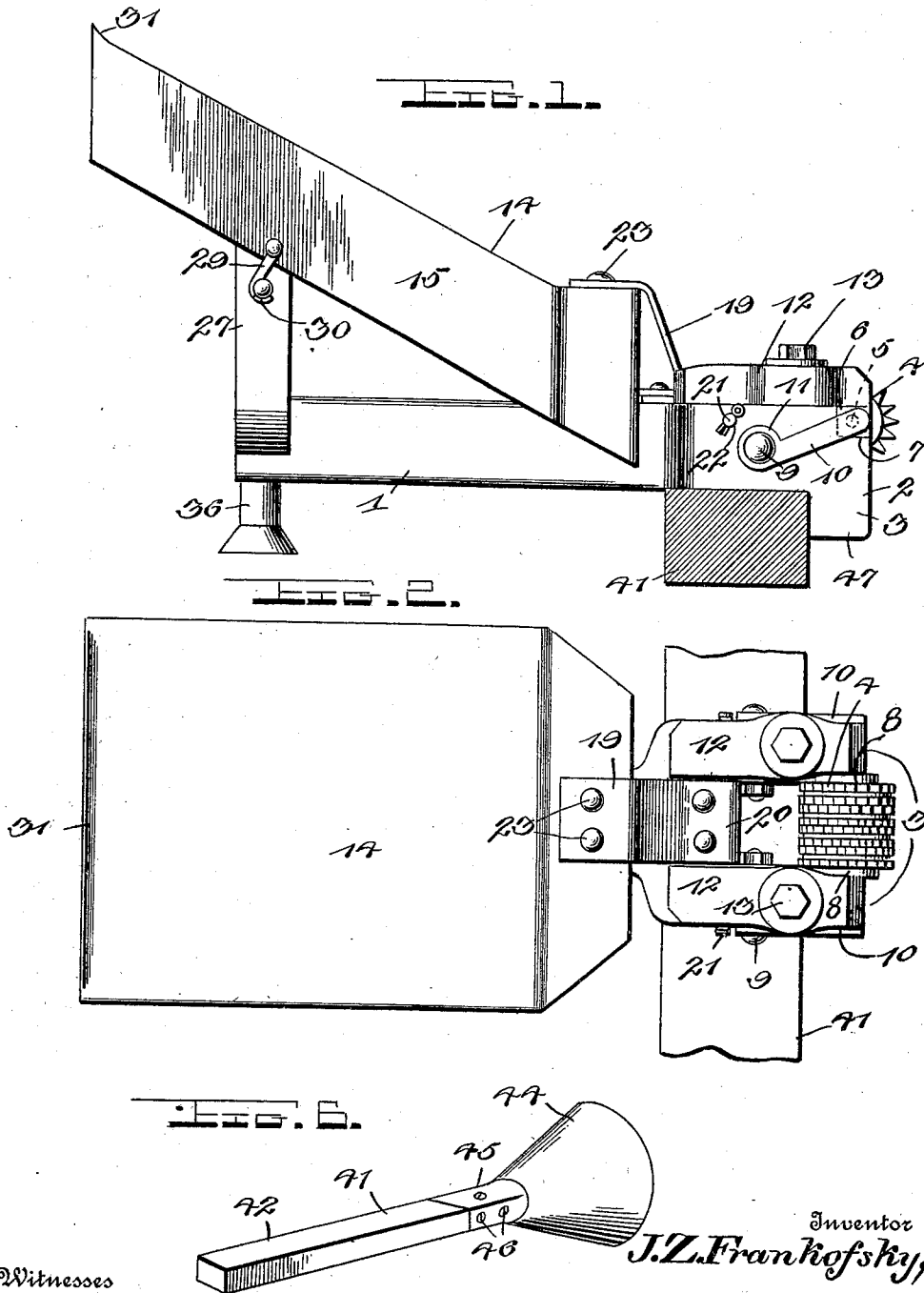


J. Z. FRANKOFSKY.
 TOOL FOR DRESSING EMERY WHEELS.
 APPLICATION FILED APR. 12, 1912.

1,041,768.

Patented Oct. 22, 1912.

3 SHEETS—SHEET 1.



Witnesses

Chas. L. Griesbauer. By
 A. B. Norton.

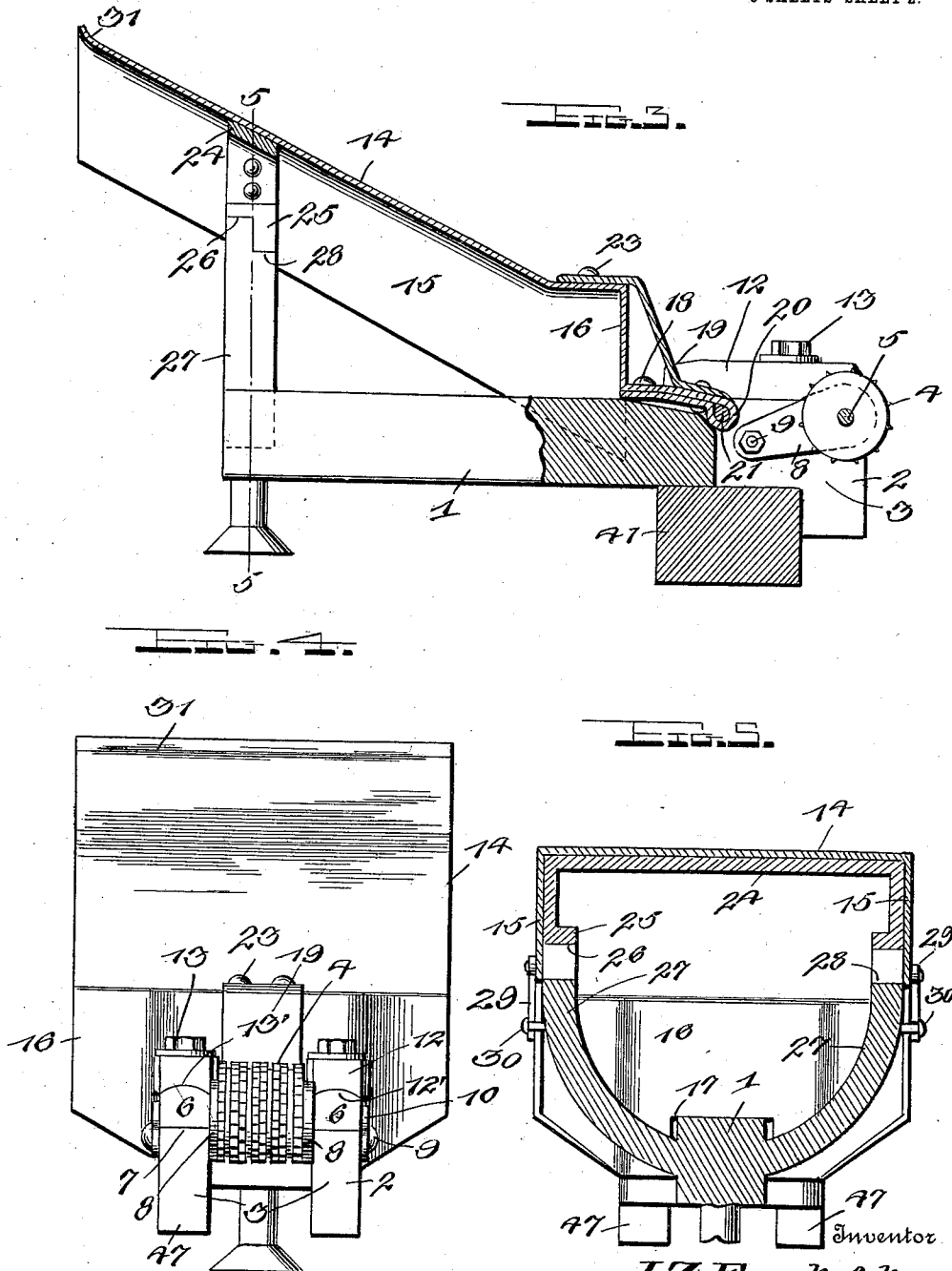
Inventor
 J. Z. Frankofsky,
 Attorney

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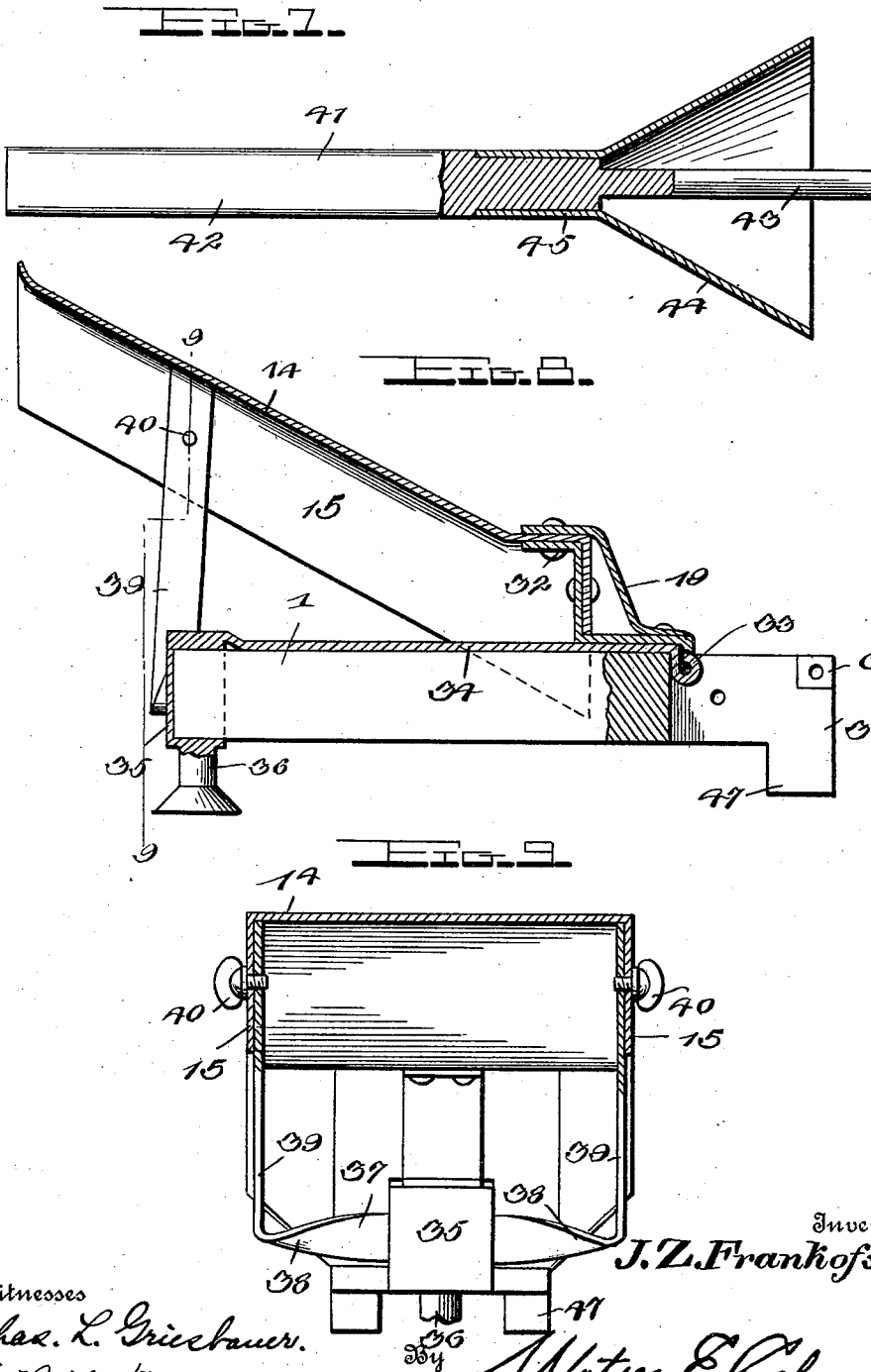
Watson E. Coleman.
Attorney

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3 SHEETS—SHEET 3.



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Inventor
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UNITED STATES PATENT OFFICE.

JOHN Z. FRANKOFSKY, OF JOHNSTOWN, PENNSYLVANIA.

TOOL FOR DRESSING EMERY-WHEELS.

1,041,768.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed April 12, 1912. Serial No. 690,451.

To all whom it may concern:

Be it known that I, JOHN Z. FRANKOFSKY, a subject of the Emperor of Austria-Hungary, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in a Tool for Dressing Emery-Wheels, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in tools for dressing emery wheels, the object of the invention being to provide a guard for use in connection with tools of this character to protect the hands, arms or other parts of the body from the flying particles of the emery wheel, when the same is being dressed.

Another object of the invention is to provide an improved guard for an emery dressing tool which can be quickly and easily attached to or detached therefrom.

A further object of the invention is to provide a device of this character which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other objects in view the invention consists in the novel features of construction and in the arrangement and combination of parts hereinafter more fully described, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a side elevation; Fig. 2 is a top plan view; Fig. 3 is a longitudinal section; Fig. 4 is a front elevation; Fig. 5 is a section on the line 5—5 of Fig. 3; Fig. 6 is a perspective view of the guide member; Fig. 7 is a longitudinal section of the guide member; Fig. 8 is a longitudinal section showing a modified form; and Fig. 9 is a section on the line 9—9 of Fig. 8.

Referring more particularly to the drawings, 1 indicates the shank of the dressing tool which is provided at one end with the bifurcated head 2 forming the spaced parallel arms 3. Mounted for rotation between the outer ends of the arms 3 are the cutting disks 4 which may be of any well known construction. The cutter disks 4 are mounted upon the transverse shaft 5 having its ends mounted in the bearing blocks 6 which are arranged upon the shoulders 7 formed on the upper edge of the arms 3 at the outer

ends thereof. The shaft 5 is held against longitudinal movement by means of the rearwardly extending arms 8 having one of their ends enlarged and mounted upon the shaft 5 and their other ends secured to the inner side of the arms 3 by means of the transverse bolts 9. The retaining levers 10 are provided having the enlarged end 11 formed integral therewith which is mounted upon the outer end of the bolts 9, and arranged on the outer sides of the arms 3. The free end of said arms being adapted to be disposed over the ends of the shaft 5 to prevent transverse movement thereof. A retaining block 12 is mounted upon the upper edge of the arm 3 and held securely in place by means of the screw bolts 13, said blocks being provided at their outer ends with the concave recess 13' adapted for the reception of the convex upper face 12' of the bearing blocks 6 to prevent any upward movement of said blocks.

The numeral 14 indicates my improved guard which is adapted to be formed of galvanized iron, heavy sheet metal or other suitable material and is provided on its longitudinal edges with the downwardly extending flanges 15, the front edge of the guard being provided with a downwardly extending flange 16 having a centrally arranged recess 17 formed therein adapted to receive the shank 1 of the tool when the guard is in its operative position. The material which is cut out from the flange 16 to form the recess 17 provides an outwardly extending flange 18, having a strap 19 riveted thereto, said strap being bent to form a sleeve 20 adapted for the reception of the pivot pin 21 which is mounted in the transverse openings 22 formed in the arms 3. The end of the strap 19 is bent upwardly and rearwardly and secured to the top of the guard member 14 by means of the rivets 23. Secured to the under side of the guard 14 adjacent the rear end thereof is a U-shaped brace member 24, having its ends enlarged as shown at 25 and are cut away to form the shoulder 26. Formed integral with the rear end of the shank 1 are the two diverging arms 27 having their upper ends cut away to form the shoulder 28 upon which is adapted to rest the ends 25 of the brace member 24, the shoulder 26 resting upon the upper ends of the arms 27.

Pivotaly secured to the downwardly extending flanges 15 of the guard, and ar-

ranged at the outer side thereof are the hooks 29 adapted to be engaged by the headed pins 30 carried by the arms 27 to securely held the guard member in its operative position. The rear end of the guard member is provided with a flaring edge 31 so that the sharp edge thereof will not come in contact with the arm of the operator. It will be readily apparent that the guard member 14 may be quickly and easily attached to the dressing tool by placing the sleeve 20 between the arms 3 and inserting the pivot pin 21, the same may be easily removed therefrom by withdrawing the pin 21 and releasing the hooks 29 from the pins 30.

In Fig. 8, I have shown a slightly modified form of my invention adapted to be used in connection with the tool wherein the arms 27 at the rear end of the shank are eliminated. The guard member 14 will be constructed the same as above described, having one end of the strap 19 extending in through the recess 17 and bent upwardly and rearwardly, the same being secured to the inner side of the guard member by means of the rivets 32. Hingedly secured to the intermediate portion of the strap 19 as shown at 33 is the rearwardly extending bar 34, said bar being provided at its rear end with a substantially rectangular socket 35 adapted for the reception of the rear end of the shank 1. Formed integral with the lower side of the socket is the resting foot 36 which may be of any well known construction. Formed integral with the socket 35 at each side thereof are the transversely extending bars 37, said bars being twisted at their outer ends as shown at 38 and extending upwardly to form supporting arms 39. The arms 39 are detachably secured at their upper ends to the downwardly extending flanges 15 of the guard members by means of the thumb screws 40 passing through the flanges 15 through the upper ends of the arms 39.

The modified form of the guard member above described is adapted to be applied to a dressing tool wherein the arms 27 are eliminated from the rear end of the shank 1, said guard member being held securely in place by having its forward ends pivotally secured between the arms 3 and its rear end held down in position by placing the socket 35 on the rear end of the shank 1. The rear end of the guard member 14 may be detached from the arms 39 by removing the thumb screws 40.

In the operation of my improved device, a guide member 41 is provided which comprises a substantially rectangular elongated body portion 42, having one of its ends reduced to form a handle 43. Mounted upon the guide member and adapted to partially inclose the handle is the shield 44 which is

substantially conical shaped in form and provided at its small end with a socket 45 adapted to be secured to the body portion of the guide member by means of screws 46. In using the dressing tool the guide member 41 is placed upon the emery wheel support and arranged adjacent the outer periphery of the wheel, the head 2 of the tool being mounted upon the guide member so that the cutting disks 4 will engage with the outer periphery of the emery wheel, the lugs 47 which are formed integral with the head 2 engaging over the inner side of the guide 41 to prevent backward movement of the head.

It will be seen from the above description that the dressing tool is mounted for transverse movement so that the cutting disks 4 can be held into engagement with the outer periphery of the emery wheel at all times, it being understood that the dressing tool is to be held in position by the left hand while the guide member 41 is held securely in place by the right hand, the shields or guards 14 and 44 protecting the hands against injury by the flying particles of the emery wheel. It will be seen by means of the novel construction of the head 2, the cutter disks 4 can be quickly and easily removed to be replaced by new ones, and the shield or guard members 15 can be quickly and easily removed if desired. From the above description taken in connection with the drawings it is thought that the advantages, use, construction and operation of my improved tool for dressing emery wheels will be readily apparent.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of construction and in the proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof.

What I claim is:

1. In combination with a shank, having a head formed integral therewith, said head being bifurcated to form two spaced arms, of a guard member having one end pivotally secured between said spaced arms, and adapted to extend rearwardly and be disposed over said shank, means carried by the rear end of said shank for supporting said guard, and means carried by the guard and adapted to engage with the supporting means carried by the shank to hold said guard in position.

2. In combination with a shank having a head formed integral with one end thereof, said head being bifurcated to form spaced arms, upwardly extending diverging arms formed integral with the other end of said shank, of a guard member comprising a body portion having downwardly extending

flanges formed on its longitudinal edges, a downwardly extending flange formed on one end, the flange on the end of the body being provided with a recess to receive said shank, an outwardly extending flange formed integral with the end of the body at the upper side of the recess, a strap having one of its ends secured to the outwardly extending flange, said strap being bent to form a sleeve, a pivoted pin arranged within the sleeve and having its ends mounted in the spaced arms, the end of said strap being bent upwardly and rearwardly and secured to the body portion of the guard, a U-shaped brace member disposed within the guard at the rear end thereof and having its ends adapted to rest upon the upper ends of the diverging arms, headed pins carried by said arms, and hooks carried by the guard member and adapted to engage with said pins and hold said guard in position.

3. In a device of the character described, the combination with a shank, having a bifurcated head formed on one end thereof, of a guard member having one of its ends pivotally secured to said head, said guard being inclined and extending rearwardly, and means carried by the shank and adapted to be detachably secured to the rear of the guard member to support the same.

4. In combination with a shank having a head formed integral with one end thereof, of a guard member having one end pivotally secured to said head, and adapted to extend rearwardly and be disposed over said shank, and means for supporting the rear end of said guard member.

5. In a device of the character described, the combination with a shank, having a bifurcated head formed at one end thereof, upwardly extending diverging arms formed on the other end of said shank, of a guard member having one of its ends pivotally secured to said head, said guard member being inclined and extending rearwardly, a U shaped brace member disposed within the guard at the rear end thereof and having its ends adapted to rest upon the upper ends of the diverging arms, and means for securely holding the rear end of said guard member in position.

6. In a device of the character described, the combination with a shank, having a bifurcated head formed at one end thereof, upwardly extending diverging arms formed

on the other end of said shank, of a guard member having one of its ends pivotally secured to said head, said guard member being inclined and extending rearwardly, a U shaped brace member disposed within the guard at the rear end thereof and having its ends adapted to rest upon the upper ends of the diverging arms, headed pins carried by said arms, and hooks carried by the guard member and adapted to engage with said pins to hold said guard member in position.

7. In combination with a shank having a head formed integral with one end thereof, said head being bifurcated to form spaced arms, upwardly extending diverging arms formed integral with the other end of said shank, of a guard comprising a body portion having a downwardly extending flange formed at one end thereof, said flange being provided with a recess to receive the shank, an outwardly extending flange formed integral with the end of the body at the upper side of the recess, a strap having one of its ends secured to the upwardly extending flange, said strap being bent to form a sleeve, a pivot pin arranged within the sleeve and having its ends mounted in the spaced arms, the end of said strap being bent upwardly and rearwardly and secured at the body portion of the guard, and means for supporting the rear end of said guard.

8. In a device of the character described, the combination with a shank, a head formed at one end thereof, upwardly extending diverging arms formed integral with the other end of said shank, a guard member comprising a body portion having downwardly extending flanges formed on its longitudinal edges, one end of said guard being pivotally secured to the head of the shank, said guard being inclined and extending rearwardly, a U shaped brace member disposed within the guard at the rear end thereof, and having its ends adapted to rest upon the upper ends of the diverging arms, headed pins carried by said arms, and hooks carried by the guard member and adapted to engage with said pins, to hold said guard member in position.

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

JOHN Z. FRANKOFSKY.

Witnesses:

HARRY DOERR,
A. W. SWARTS.