(No Model.)

W. Z. BEVIS.

COMBINATION MILLSTONE PICK

No. 420,003. Patented Jan. 21, 1890.

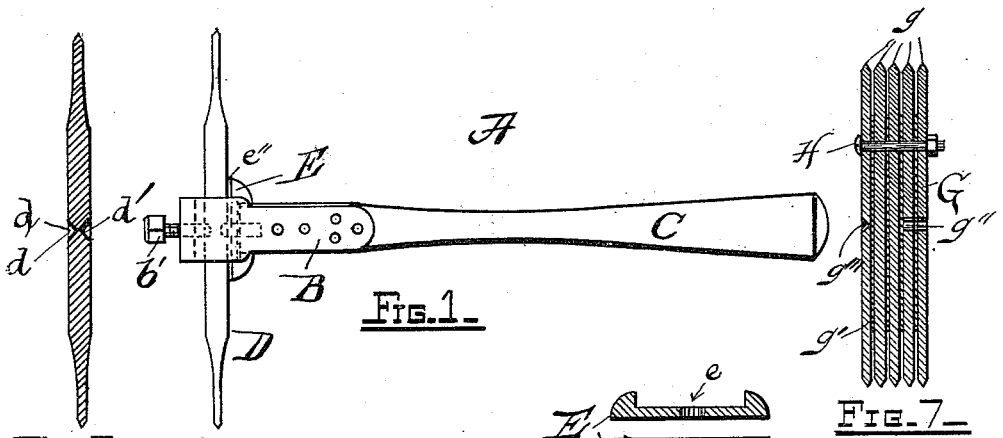

FIG. 1.

FIG. 5.

FIG. 7.

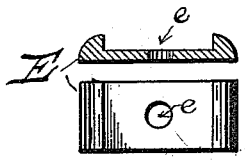

FIG. 3.

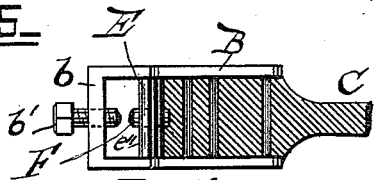

FIG. 4.

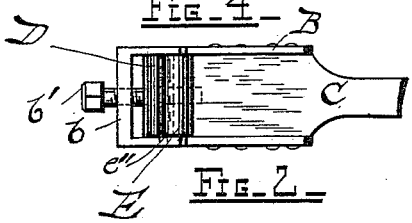

FIG. 2.

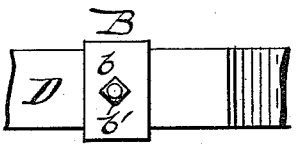

FIG. 6.

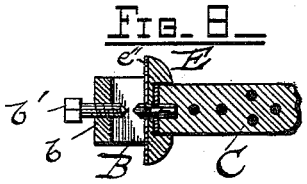

FIG. 8.

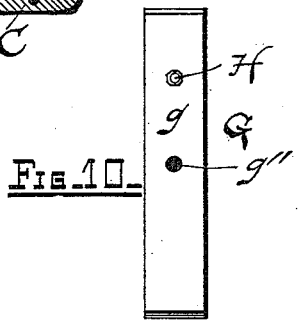

FIG. 10.

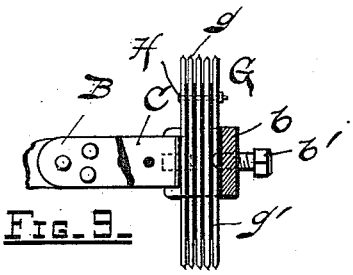

FIG. 9.

Witnesses

A. P. Wood

E. P. Thomas.

Inventor

WILLIAM Z. BEVIS.

By His Attorney

Albert G. Moore

UNITED STATES PATENT OFFICE.

WILLIAM Z. BEVIS, OF CHEROKEE MILLS, GEORGIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO J. J. BEVIS, OF SAME PLACE.

COMBINATION MILLSTONE-PICK.

SPECIFICATION forming part of Letters Patent No. 420,003, dated January 21, 1890.

Application filed July 6, 1889. Serial No. 316,685. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM Z. BEVIS, a citizen of the United States, and a resident of Cherokee Mills, in the county of Cherokee and State of Georgia, have invented certain new and useful Improvements in Combination Millstone-Picks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to devices for leveling, furrowing, and dressing stone, and more particularly to that class of stone-working tools known as "millstone-picks" or "bush-hammers."

The object of the invention is to improve tools of this class, so as to render them cheaper to the consumer and better and more convenient of construction and operation.

The invention therefore consists of an improved form of handle and blade of such devices, the details of all of which will be hereinafter fully described and claimed, and are illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the device with all the parts assembled. Fig. 2 is a top view of the same with the handle broken off close to the clamping-piece. Fig. 3 is a detail of the block employed when the thinner head is used. Fig. 4 is a view of the same parts as Fig. 2, excepting that the pick is removed and the portion of the handle shown in Fig. 1 is in section centrally thereof in this figure. Fig. 5 is a central sectional longitudinal view of the pick, showing the countersunk holes therein. Fig. 6 is a face view of Fig. 1, showing the cutting ends of the pick removed, this figure being for the purpose of more clearly exhibiting the clamping-piece and the set-screw passing through the said clamping-piece. Fig. 7 is a central longitudinal section of the bush-hammer head, which is interchangeable with the pick in the handle herein shown, showing also the holes therein and the manner of fastening the plates together. Fig. 8 is a central longitudinal vertical section of the parts shown in Fig. 4, more plainly illustrating the elastic cushions which rest against the pick and bush-hammer when in place, and also showing the pin inserted in the handle, whereby further resistance to slipping is given than would be afforded by the screw entering opposite thereto. Fig. 9 is a side elevation, partly in section, showing the bush-hammer in position in the handle, the part shown in Fig. 3 having been removed to give room for said hammer. Fig. 10 is a front view of the bush-hammer when assembled ready for insertion in the handle.

In the figures, like reference-marks indicating corresponding parts in the several views, A is the handle, which is composed of the shackle B and the wood C, said shackle extending around the end of the wood, fitting closely to the sides, and leaving a space of sufficient size between said shackle and the end of the wood for the insertion of the parts which will be hereinafter described. This shackle may be fastened to the wood either by rivets, bolts, or in any other manner desired. Through the short side *b* of the said shackle B is a screw *b'*, which enters and impinges against the countersunk place in one side of the picks D, hereinafter described, as best shown by dotted lines in Fig. 1. The construction just described forms a socket on the end of the handle, which is capable of encircling the bush-hammer, which is somewhat larger necessarily than the pick, and it also places a set-screw in such a position that it will bear on the pick and hold it securely. When it is desired to hold the pick, it will be necessary to restrict the socket a little, for which purpose the block E is supplied. Said block E has lips on each end, which extend over the sides of the wood C a short distance, and a hole *e* in its center for the purpose of allowing the projection F to protrude through it and enter the side of the pick opposite to that at which the screw *b'* enters said pick. At the present time it is considered sufficient to use only the screw *b'* entering said pick. For all ordinary use the screw is sufficient to hold the pick in place; but for heavy work,

and especially in handling the bush-hammer, the projection F is advantageous and desirable. When it is desired to use the bush-hammer, hereinafter described, in the handle, the block E is removed to give room therefor. On the face of the block E is a strip of leather or other elastic and durable material, said leather being for the purpose of giving the pick more frictional contact than would be given by the contact of the two hard surfaces; also, for friction to hold the bush-hammer when it is used and the block E removed, a strip of the same material is applied to the side of the opening opposite to the screw b', which is presented for direct contact with the hammer as soon as the block E is removed. These strips of leather also give a slight additional elasticity to the pick, which is advantageous, as this elasticity is obtained otherwise than at the expense of strength in the pick, as to get this same elasticity without using the strip of leather it would be necessary to draw the pick thinner near its working-points. Many other kinds of material would prove equally efficient in the places occupied by the leather; hence I do not confine myself to the use of leather in this connection.

The pick D is of such form as would be easily made from a bar of steel, for instance, one-half inch by one and one-fourth inch in size, drawn down at the ends in such a manner as to give it the requisite resilience to give, in connection with the elastic strips hereinbefore described, the required spring to the impingement of the pick against the face of the millstone. This pick has the advantage which cannot be too much appreciated when it is taken into consideration that most mills running stone are some distance from an establishment where the work of drawing out and tempering the common form of pick could be done, and hence it is either necessary to send the pick a distance to have it repaired and wait or to carry in hand a large supply of picks. Any ordinary blacksmith can draw this improved form to the desired thinness at the ends, and thus the delay of sending away and the expense of carrying a large supply of picks to guard against the delay necessary to send them off are obviated. Then, in addition even to these advantages, the pick can be made much cheaper than the ordinary form, all that is necessary in their construction being to cut off a piece from the bar, draw it thin at the ends, countersink it in the center, and harden it. Then, being ground, it is ready for insertion into the handle adapted to hold it to be used.

The bush-hammer G is composed of plates g of steel, of the proper size and temper, placed together in the ordinary manner, excepting that they have between them elastic strips g' of leather or other suitable material, leather, however, being preferred on account of its nature, it forming the best combination of hardness and elasticity of surface to take advantage of the slightest inequality of the surface of the outer plates to cause more friction between said plates, to prevent their slipping on each other and so working loose. This bush-hammer is inserted into the space in the end of the handle A, the projection F entering the hole g'' in one side of the hammer and the set-screw entering the countersink g''' in the same manner as when the pick D is used in said handle. To further compress the plates one against the other, a bolt H is used, which passes through all of the plates, and is tightened thereon by screwing up the nut h of said bolt. The plates composing said hammer G may be in any number desired; but five or six is about the most desirable proportion of thickness and width, each plate being thick enough to have sufficient strength and a slight resilience to better disintegrate the surface struck by the face of the hammer. If found necessary for very heavy work, a bolt may be placed in the outer end corresponding to the bolt H.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a millstone-pick of the class described, the combination of the plates g, beveled on their ends and placed side by side, and having between them the leather or other elastic material g', the bolt H, passing through said series of plates, and the countersink g''' in one side thereof, as shown and described.

2. In a combination millstone-pick, the combination of the handle A, composed of the wood C and shackle B, the set-screw b, pin E, plates g, having between them the elastic material g', and having in opposite sides of the series of plates the countersink g''' and the hole g'' for entrance of the set-screw b and the pin F, respectively.

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

W. Z. BEVIS.

Witnesses:
A. J. LEE,
C. M. LOVINGOOD.