J. H. Whitney.

Gold Mining Sluice Box.

No. 100,829. Patented Mar. 15, 1870.

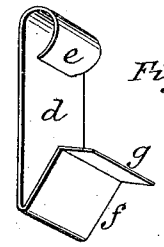

Fig. 2.

Fig. 1.

Fig. 3.

Witnesses.

Abel Combs

Oscar A. Combs.

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JOHN H. WHITNEY, OF HELENA, MONTANA TERRITORY.

Letters Patent No. 100,829, *dated March* 15, 1870 *antedated March* 5, 1870.

IMPROVEMENT IN SLUICE-BOXES FOR GOLD-MINING.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN H. WHITNEY, of Helena, in the county of Lewis and Clark, in the Territory of Montana, have invented a new and improved Instrument for Fastening False Bottoms or Riffles in Sluice-Boxes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawings and to the letters of reference marked thereon making a part of this specification, in which—

Figure 1 represents a section of a sluice-box, with riffle *b* fastened with my spring riffle-fastener *d d*. Letter *a*, fig. 1, represents one side of sluice-box, the corresponding side *c* being represented as turned down, so as more plainly to show the operation of my invention.

Figure 2 represents my invention detached from sluice-box.

Figure 3 represents the back or side of the fastener next to the box in fig. 1, showing the point *e* that is turned through the long end *d* of the spring at *e*, fig. 2.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

I manufacture my spring riffle-fastener from any suitable steel, about one inch wide and about one-half of one-sixteenth of an inch thick. The lower end is formed into a triangular spring wedge, letter *f*.

About one inch from the point of this wedge the short side *g* is turned out from the long side *d* of the spring, and at right angles with the short side *f*, so as to lay on the top of the riffle when the spring wedge is inserted in the space between the edge of the riffle and sluice-box. The long side *d* is pointed at the upper end and turned over and through the side *d*, so as to form the point *e*, fig. 3.

To use my invention, the sluice-box and riffle are constructed in the usual way, the riffle being about two inches narrower than the bottom of the sluice-box, so as to leave a space of one inch on each side between the riffle and box. In this space are usually driven stones or wooden wedges, which is a slow and very unsubstantial method of fastening. Instead of stones or wooden wedges, I insert on each side of the box, in the space a short distance from the end of the riffle, on each side, one of my spring fasteners, pushing the spring wedge firmly down into the space, bearing against or pushing the long side of the wedge against the side of the sluice-box, which forces the point *e*, fig. 3, into the side of the box, thus firmly securing the riffle to the bottom of the sluice-box.

The great advantage of this fastener over all other modes is, it adjusts itself to any width of space between the riffle and box, is much quicker inserted than stones or wedges, and never becomes detached while in use, as stones and wooden wedges frequently do, causing great loss of gold and quicksilver to the miner.

What I claim as my invention, and desire to secure by Letters Patent, is—

An adjustable spring riffle-fastener, made and used substantially in the manner described, and for the purposes herein set forth.

JOHN H. WHITNEY.

Witnesses:
A. COMBS,
A. J. EDWARDS.