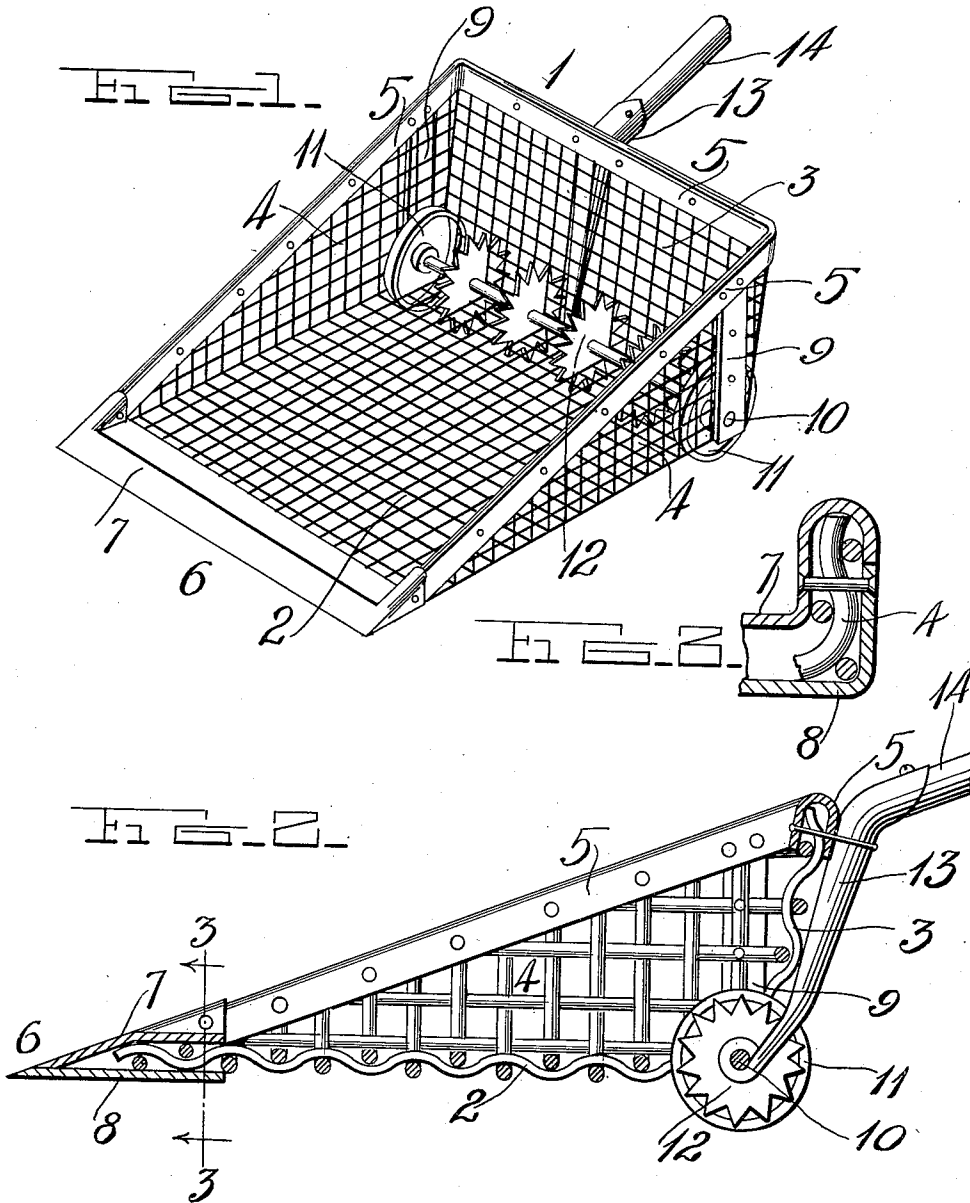


G. HOLLINSHED.
ASH SIFTING SHOVEL.
APPLICATION FILED OCT. 31, 1910.

1,007,202.

Patented Oct. 31, 1911.



Witnesses
J. R. Pierce.
O. B. Hopkins

Inventor
George Hollinshed.
by *H. B. Wilson & Co.*
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE HOLLINSHED, OF WHITE PLAINS, NEW YORK.

ASH-SIFTING SHOVEL.

1,007,202.

Specification of Letters Patent.

Patented Oct. 31, 1911.

Application filed October 31, 1910. Serial No. 589,980.

To all whom it may concern:

Be it known that I, GEORGE HOLLINSHED, a citizen of the United States, residing at White Plains, in the county of Westchester and State of New York, have invented certain new and useful Improvements in Ash-Sifting Shovels; and I do 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.

This invention relates to improvements in ash sifting shovels.

One object of the invention is to provide an ash sifting shovel having means for operatively supporting the same in the ash receptacle of a furnace or stove whereby the fine ashes and dust may be readily separated from the cinders and partly burned coal and said cinders and coal thrown back into the furnace while still hot.

Another object is to provide a device of this character which will be strong, durable and comparatively inexpensive in construction, efficient in operation and well adapted for sifting the ashes either in or out of the furnace.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a perspective view of my improved ash sifting shovel; Fig. 2 is a longitudinal vertical sectional view of the same; Fig. 3 is a cross sectional view on the line 3—3 of Fig. 2.

My improved ash sifting shovel comprises a body 1 formed of heavy woven wire having a mesh of the desired size. The body 1 consists of a bottom 2, an inclined rear end 3 and tapered sides 4. The upper edges of the sides incline from the upper edge of the rear end to the front edge of the bottom 2.

Around the upper edges of the sides 4 and rear end of the shovel is arranged a binding 5 formed of a strip of sheet metal bent or folded upon itself and engaged with the upper edges of the wire netting to which said binding is secured by rivets or other suitable fastening means.

To the forward edge of the bottom and ends of the sides of the shovel is secured

a blade 6 which consists of an upper sheet metal plate 7 the opposite ends of which are bent around the sides of the shovel as shown. The upper plate 7 is riveted or otherwise rigidly secured to a lower plate 8 and the forward edges of said plates are drawn out or tapered to a comparatively sharp edge as shown.

Arranged on the opposite sides 4 of the shovel and projecting upwardly from the inner corners thereof are bearing plates 9 the upper edges of which are secured between the folded edges of the upper side binding strips as shown. In the lower ends of the plates 9 are formed bearing apertures in which is revolubly mounted a supporting shaft or axle 10 which is disposed along the inner side of and adjacent to the bottom of the sifter near the rear end 3 as shown. Fixedly mounted on the shaft 10 adjacent to and within the sides 4 of the shovel are supporting and operating wheels 11 the upper portions of which revolve in the shaft as shown and being so arranged to facilitate the insertion of a shovel in a small ash box and also permits one end of the shovel to be inserted closely in a corner of an ash box. Also fixedly mounted on the shaft and spaced apart at suitable intervals are a series of toothed agitating wheels 12 the purpose of which will be hereinafter described.

Secured to the rear end 3 is a handle socket 13 in the lower end of which is formed an eye adapted to receive the shaft 10. The socket 13 is secured to the end 3 and to the binding strip 5 on the upper edge thereof in any suitable manner and is adapted to receive a handle 14 which may be of any suitable length and constructed of any suitable material thereby providing for the operation of the shovel.

In using the shovel the same is forced into the pile of ashes to be sifted before or after they have been removed from the ash pit of the furnace or stove. After the shovel has thus been engaged with the ashes it is rocked up and down and agitated by the handle thereby gently but thoroughly separating the fine ashes and dust from the cinders and partly burned coal without causing the dust to scatter or rise. In this operation the separation of the ashes and dust from the cinders is greatly facilitated by the toothed agitating wheels 12 on the axle.

By means of my improved sifting shovel, the ashes which have just been shaken from

the furnace may be sifted in the ash pit while still red hot and immediately thrown back into the furnace before cooling thereby saving a great deal of heat which would otherwise be wasted.

5 From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

10 Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

15 Having thus described my invention, what I claim is:

20 1. A sifting shovel having a foraminous body with revoluble agitators mounted therein, and actuating means for said agitators operable by the passage of the shovel over a supporting surface.

25 2. A sifting shovel comprising a foraminous body having an open front, supporting wheels revolubly mounted within said body and projecting below the bottom thereof, and a handle connected to manipulate the shovel.

30 3. A sifting shovel comprising a foraminous body consisting of a bottom having side and rear walls, supporting wheels revolubly mounted inside the shovel and project-

ing below the bottom thereof, agitators mounted in said shovel, and a handle to 35 manipulate the shovel.

4. A sifting shovel comprising a foraminous body consisting of a bottom, side and inclined rear walls, an axle revolubly mounted in said sides and extending transversely 40 through said body, supporting wheels fixedly mounted on said axle within said shovel and adapted to revolve in said shovel, a portion of said wheels projecting below the bottom of said shovel, and a 45 handle for the shovel.

5. A sifting shovel comprising a foraminous body consisting of a bottom, side and inclined rear walls, bearing plates secured to the sides of said body and projecting 50 downwardly, an axle revolubly mounted in said plates and extending transversely through said shovel, supporting wheels fixed to said axle within said shovel adjacent the sides thereof and projecting 55 through the bottom of the shovel, a plurality of toothed wheels fixed on said shaft and operable within the shovel, and a handle connected with said shovel.

In testimony whereof I have hereunto set 60 my hand in presence of two subscribing witnesses.

GEORGE HOLLINSHED.

Witnesses:

JAMES ADAMS,
H. J. ADAMS.