S. A. KINSEY.
Stove-Hearth.

No. 203,278. Patented May 7, 1878.

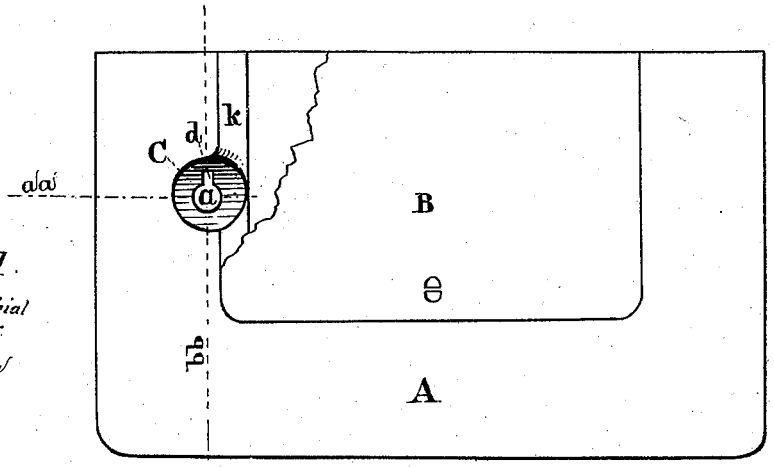

Fig. 1.
Superficial View of Hearth

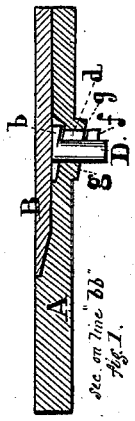

Fig. 2. Sec. on line "bb" fig. 1.

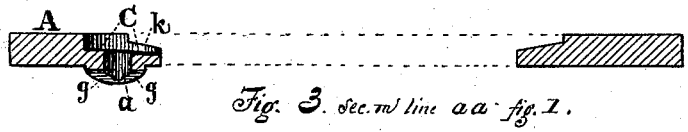

Fig. 3. Sec. on line a a fig. 1.

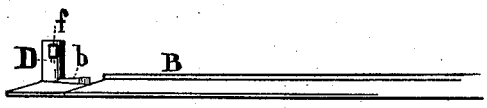

Fig. 4.

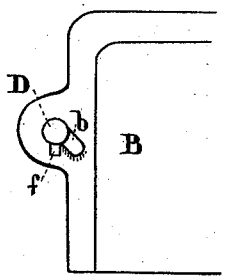

Fig. 5

Witnesses
Luther Shurlow
Lyndhurst Shurlow

Inventor
Samuel A. Kinsey
by E. Shurlow his
atty in fact

UNITED STATES PATENT OFFICE.

SAMUEL A. KINSEY, OF PEORIA, ILLINOIS, ASSIGNOR TO DAVID C. PROCTOR AND RICHARD A. CULTER, OF SAME PLACE.

IMPROVEMENT IN STOVE-HEARTHS.

Specification forming part of Letters Patent No. **203,278**, dated May 7, 1878; application filed April 11, 1878.

To all whom it may concern:

Be it known that I, SAMUEL A. KINSEY, of the city of Peoria, in the county of Peoria, in the State of Illinois, have invented an Improvement in Stove-Hearths; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawings, making a part of this specification, in which like letters of reference refer to like parts, and in which—

Figure 1 represents a superficial view of the hearth and plate, the pivotal lip broken off to exhibit the bearing-socket C; Fig. 2, vertical section on line *b b*, Fig. 1, to show pin and bearings; Fig. 3, vertical section on line *a a*, Fig. 1; Fig. 4, hearth-plate reversed, edge view; Fig. 5, superficial view of the last diagram.

The object of this invention is, first, a swinging and removable hearth-plate which shall elevate itself in opening it, so as to raise itself out of its surrounding recessed margin and rest horizontally on the hearth or hearth-margin; second, in presenting a uniform level surface corresponding with that of the surrounding margin which inclosed its edges when it is in place.

The first of these objects is accomplished by the use of a vertical pivotal pin pendent from the lower surface of one side of the hearth-plate, passing through a corresponding socket in the stove below, on the under surface of which it is confined by means of a short lug or projection on one side of the pin, with a corresponding passage on one side of said socket-hole for the introduction of said lug, as in similar pivotal devices.

For the purpose of preserving the uniform level of the hearth-plate in swinging it, the upper surface of the socket around the pin-hole is made shelving or inclined toward that edge of the plate which is next to the fire, or that side toward which the plate moves in being closed, and a corresponding inclined surface on the lower side of the socket or pin-hole exactly parallel with said described upper surface. These surfaces are for forming at once a surface above for the bearing of a lug or projection on one side of said pin at or near its base, and a corresponding lug or bearing projecting from one side of said pin at the lower extremity of the latter, to form a corresponding bearing to the upper lug, the action of the two lugs being, in swinging the hearth-plate, to hold the plate level and raise or lower it by their passage along the inclined surfaces.

The second part of my invention is accomplished by the pivotal pin and bearing-surfaces above described, which, in swinging the plate, raise it bodily upward in a horizontal position, until, turning on its pivot far enough, it rests upon the inclosing margin of the hearth, and in reswinging said plate said inclined socket gradually lowers it into its recess or proper place in the hearth flush with the general surface of said hearth.

One of the forms in which I construct this plate and pivot is as follows: A represents the stove hearth or margin; B, hearth-plate; C, pivotal bearing-surface surrounding the socket-hole *a* and pin-lug passage *d*, said bearing-surface inclining downward toward the body of the stove or inner edge of the hearth. *g* is the corresponding incline below, on the opposite or lower side of the hearth A, surrounding said socket-hole *a*. D is the pivotal pin pendent from the lower side of said hearth-plate B; *f*, lug or detent upon the lower end of said pin, and confined to a bearing on the inclined surface *g* by means of the corresponding lug *b*, near the base of said pin, upon the lower surface of the plate B, which lug *b* moves upon the upper incline C and raises said plate B, when the latter is swung outward high enough to pass over and rest horizontally upon the hearth-margin A, being thus supported by means of the confining-lug *f* upon the lower end of the pin D.

What I claim as my invention is—

1. In a swinging hearth-plate, a pivotal socket and pin, in which the plate is caused to swing at a uniform horizontal position by means of an inclined surface around the pivot-hole above, with a corresponding inclined surface parallel therewith below, on the other side of the socket, both surfaces respectively traversed by corresponding bearing-surfaces or lugs *f b*, the combined action of which surfaces and bearings, in swinging said plate

open, to raise the latter out of its marginal recess by the passage of said bearings up the respective inclines C *g*, substantially as and for the purposes described.

2. In a stove-hearth, the inclined bearing-socket C and parallel lower incline *g*, in combination with lug *f* of pin D and bearing or lug *b* of plate B, substantially as and for purposes described.

3. In a hearth and swinging stove-hearth plate, the obverse bearing-socket C, inclined toward the inner edge of the plate, and reverse bearing *g*, parallel to each other, in combination with the socket-hole *a d*, pin D, lug *f*, and bearing *b* of the plate B, substantially as and for the purposes described.

In testimony that I claim the foregoing stove hearth and plate I have hereunto set my hand.

SAMUEL A. KINSEY.

Witnesses:
J. M. MORSE,
H. W. WELLS.