

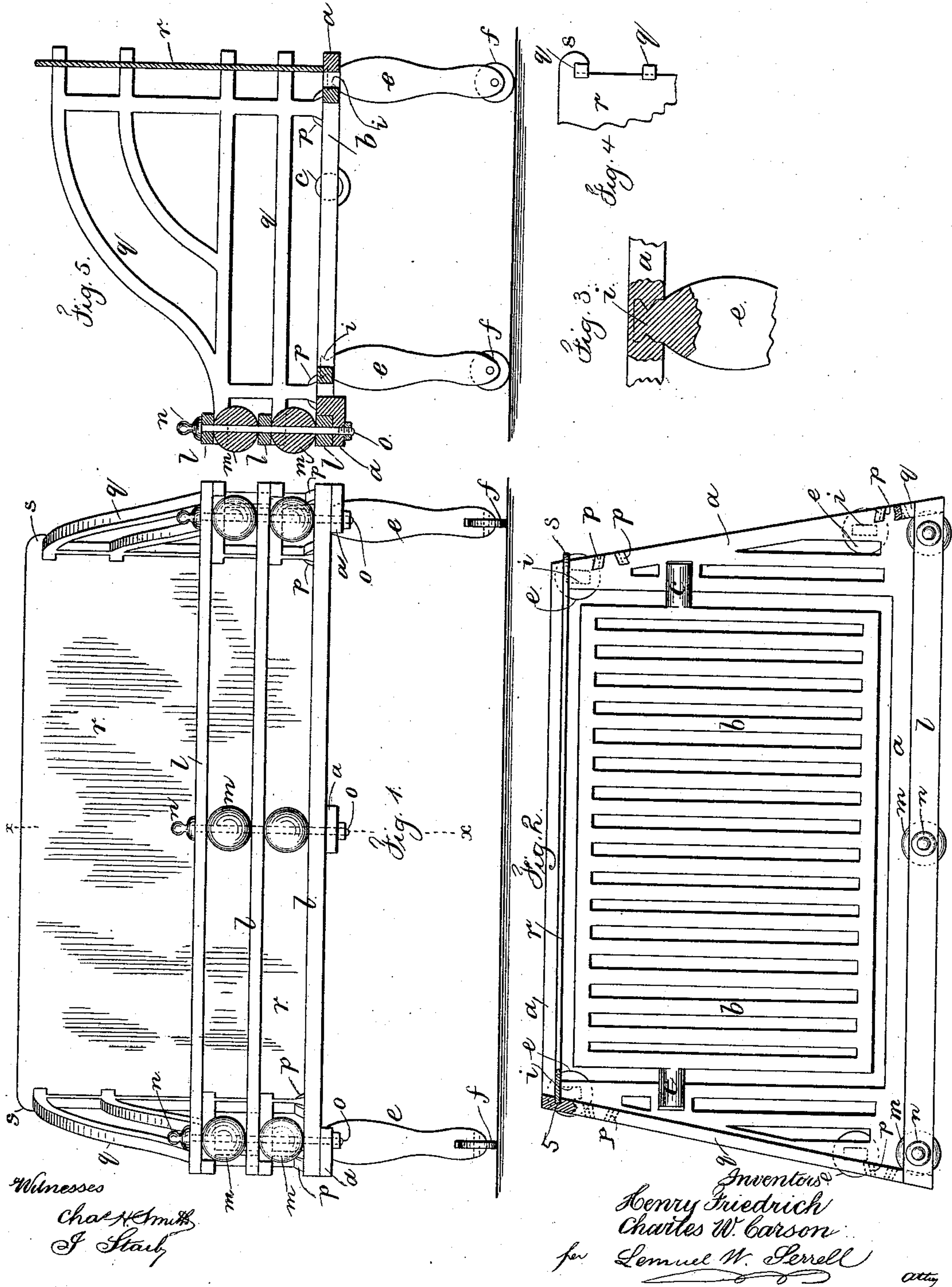
(No Model.)

H. FRIEDRICH & C. W. CARSON.

PORTABLE BASKET GRATE.

No. 324,102.

Patented Aug. 11, 1885.



UNITED STATES PATENT OFFICE.

HENRY FRIEDRICH AND CHARLES W. CARSON, OF PORT CHESTER, N. Y.

PORTABLE BASKET-GRATE.

SPECIFICATION forming part of Letters Patent No. 324,102, dated August 11, 1885.

Application filed April 18, 1884. (No model.)

To all whom it may concern:

Be it known that we, HENRY FRIEDRICH, of Port Chester, in the county of Westchester and State of New York, and CHARLES W. CARSON, of the same place, have invented an Improvement in Portable Basket-Grates, of which the following is a specification.

Basket-grates for fire-places have been made of a configuration resembling our device, but they are constructed in a different manner.

Our improvement relates to the joints by which the parts are put together, so that the expense of construction is lessened and the basket-grate increased in strength.

In the drawings, Figure 1 is an elevation of the grate. Fig. 2 is a plan of the grate partly in section. Fig. 3 is a section of one of the legs. Fig. 4 is a view of part of the back. Fig. 5 is a section at the line *x x*, Fig. 1.

The grate-frame *a* is usually wider at the front than the back. The grate *b* is supported upon trunnions *c*, so as to be dropped for emptying the fuel.

The legs supporting the grate-frame have heretofore been cast in one piece with such frame, and to allow for drawing the pattern out of the sand they have been simply plain and tapering.

We have improved upon the legs by casting them separately from the grate-frame, each leg *e* being more or less ornamental, and preferably provided with a roller, *f*, at the bottom, so that the basket-grate can be rolled back and forth in the fire-place. At the top of each leg there is a dowel, *i*, having a peripheral groove, and the dowel is preferably oblong, so as to insure the proper placing of the leg in the pattern previous to the molding of the grate-frame pattern in the sand.

After the grate-frame pattern is removed the iron is cast into the mold and runs around the dowels of the respective legs and holds them permanently to the leg-frames.

It is important that the front bars, *l*, of the basket be smooth and parallel, so as to be ground off and polished on the top and front surfaces. We cast such bars, and either cast or bore holes for the bolts *o*, that pass through the bars *l*, the intermediate ornaments *m*, and

through the grate-frame *a*. These bolts *o* are provided with nuts at their lower ends, the heads usually being countersunk in the top bar, *l*, and ground off, except where there is a top ornament, *n*, in which case such ornament forms the head for the screw-bolts *o*.

Upon the surfaces of the grate-frame *a*, near their ends, there are dovetail ribs *p*, and the end pieces, *q*, of the grate are cast with dovetailed lower ends, to be slipped in between the dovetail ribs *p* from the inner part of the grate-frame, so that said ends are held in their places.

The dovetail is tightened by any pressure of coal within the basket-grate.

In the vertical inner faces of the end pieces, *q*, there are notches or grooves, as shown at 5 in the plan view, Fig. 2, and the back plate, *r*, is of a size to slide vertically into such grooves, and at the top corners of the back there are downward projections or hooks *s*, that pass outside the upper edges of the end pieces, *q*, so as to prevent such ends spreading by the pressure of the fuel within this basket-grate.

Usually the back plate will be ornamented with raised figures and not have any holes or openings through it.

The basket-grate made in this manner is cheap to construct and very strong, and the front bars can be ground and polished off, so as to be highly ornamental.

The legs may be cast in any desired manner and with or without the rollers; but they are to be completed before the dowels at the upper ends are placed in the pattern, because such legs can be more easily fitted with the rollers when separate from the grate-frame.

We claim as our invention—

1. In a portable basket-grate, the legs for the grate-frame having dowels at their upper ends, and the grate-frame cast around such dowels and holding said legs, and dovetailed lugs upon the surface of the grate-frame, in combination with the end pieces, *q*, of the basket-grate having dovetailed projections fitting between such lugs, the bars *l*, intermediate ornaments *m*, and screws *o*, substantially as set forth.

2. The end pieces, *g*, having notches upon
their inner faces, in combination with the back
plate, *r*, passing vertically into such notches,
and having hook *s* passing down outside the
5 end pieces, and the grate-frame *a*, to which
the end pieces are connected, substantially as
specified.

Signed by us this 31st day of March, A. D.
1884.

HENRY FRIEDRICH.
CHAS. W. CARSON.

Witnesses:

STEPHEN WELLSTOOD,
JOHN GRANDISON.