

widest end up stream, and the more they are forced down, the tighter they will be pressed together."

52. For an *Edging Iron, or Grooving Roller, for Grooving Tin Plates*, and other sheet metal; Charles Fisher, York, York county, Pennsylvania, February 28.

Two rollers are to turn in a frame, like flattening mill rollers. They may be made wholly of iron, or with the exception of the grooving part, wholly of wood. Along one of the rollers a groove is made of about one-eighth of an inch in width, and three-eighths in depth. The groove does not point to the centre, but is like a kerf along the roller, which would be made by a saw intended to cut off a thin segment of the roller.

The claim is to "the exclusive right of an edging iron, or grooving roller, in which the tin plate, sheet iron, sheathing copper, &c. is put, and the edge turned, in one or two operations, from one extremity of the tin, iron, copper, &c. to the other; and also the right to the use of the rollers for edging."

Various grooving irons have been made, and are extensively used for the above purpose; no general claim, therefore, to such an instrument can be valid, although the particular construction of a machine differing from the others would be a good subject for a patent.

53. For a *Machine for Shaving Leather*; James Reilly, Waynesborough, Franklin county, Pennsylvania, February 28.

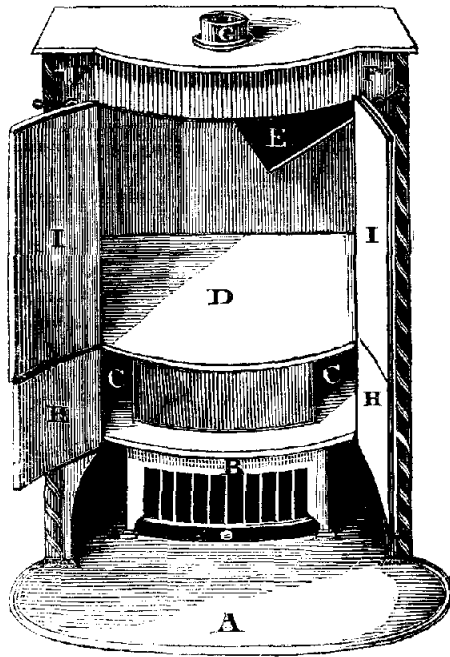
The leather to be shaved is drawn along, by the turning of a roller, between a knife, and a plate of iron, which may be so raised or lowered as to regulate the thickness. There is also a contrivance for shaving the leather tapering, by turning a roller, hung eccentrically, under the iron plate before named, which raises the plate as the leather proceeds. There is a general claim to the machine which can hardly be sustained, machines for the same purpose having been heretofore made, in a similar way. The apparatus for cutting the leather tapering, for covering whips, and other purposes, is probably new, and would, therefore, have been the proper subject of a special claim.

SPECIFICATIONS OF AMERICAN PATENTS.

Specification of a patent for a "Shifting Cooking Stove." Granted to HENRY CRESSMAN, city of Philadelphia, February, 1853.

To all whom it may concern, be it known that I, Henry Cressman, of the city of Philadelphia, and state of Pennsylvania, have invented an improvement in the stove intended, principally, for cooking with anthracite coal, which I denominate the shifting cooking stove, and that the following is a full and exact description thereof.

In the construction of the grate for holding the fuel, there is nothing peculiar. It is sustained upon the bottom plate of the stove, which I generally make with a lap, resembling that of the common Franklin stove, which I usually perforate to allow the ashes to fall into a drawer below the plate; this admits of the placing the grate lower than it could otherwise be placed, and renders it the more convenient. A, in the accompanying drawing, represents the bottom plate, and B the grate. The upper part of the grate passes through a plate C C, into which it is fitted. The front containing the bars, and the back and end plates, may be made in separate pieces of cast iron, and the back and ends may be lined with fire brick, if preferred.



At a convenient height above the plate C C, is placed another plate D. A height of four or five inches will allow of sufficient room for supplying the grate with fuel. The grate is surmounted by an oven of which the last described plate forms the bottom, when the stove is used for cooking. The plate C extends to the side and back plates of the oven; but the plate D does not touch the side plates by two or three inches, or such distance as may be thought requisite for the flues which are to ascend on each side of the oven. The plate D is hinged, or works upon pins, on its back edge, so that it may be turned up against the back plate of the oven, when not required for cooking; it may also be so fixed that it can be lifted out altogether. This plate,

by its turning back, or removal, constitutes one of the shifting parts of the stove.

The inner side plates, between which and the end plates of the stove are the spaces for flues, are also made to shift, so that when the plate, D, is turned back, and these side plates are removed out of the way, the space which before constituted the oven, forms merely an open chamber above the grate. These inner side plates, I divide on each side into two; the lower division falling into ledges prepared for them, and passing a little below the ends of the plate D, and extending up to about one-half of the height of the oven. The upper divisions are hung upon joints, so that they may be turned up against the top plate of the oven. One of these is shown in the act of being turned up, at E. The cranks, or handles, F F, serve to shift these parts, and are provided with catches which latch them in their places. When they are down, the flues on each side are complete, and the heated air is compelled to pass within them. When up, the heated air is diffused through the whole space of the oven, which will rarely be found objectionable in cooking, but they may be removed and replaced instantaneously.

The top of the stove is formed of two plates, to conduct the heated air to the pipe G.

Provision is made in, or on, the inner plates to put bars across the oven to rest dishes on, so that whilst some articles are being cooked on the shelf D, others may be placed on these bars, and form tiers above them. Cooking, &c. may be performed upon these, over the open fire, when the plate D is thrown back.

The folding doors which enclose the stove I divide into two parts H I, and J K; the lower parts serving to enclose the space between the grate and the oven, and the upper parts enclosing the oven proper. The lower doors serve also to regulate the heat, accordingly as they are opened or closed.

In the use of this stove there are various arrangements which will be found useful, and which experience will suggest. The following will often be found convenient. The lower side plates may be taken out, and the plate D, lifted up and laid on the ledges in which the lower inner end plate slides, when by turning down the upper end plates, a smaller oven will be formed, and more space allowed above the open fire, for cooking in other ways.

This stove may be altered in its form, and in the particular arrangement of its parts, whilst those features which constitute the difference between it and other stoves for cooking and for heating apartments, are still retained. It is these alone which I claim as my invention, and for which I ask a patent. They consist of the shelf D, and the inner shifting plates of the side flues, by which this stove may be converted into a simple open stove, or have an oven formed in it, at pleasure, whether the same be effected in the exact way which I have indicated, or in any other operating upon the same principle, and producing similar results.

HENRY CRESSMAN.