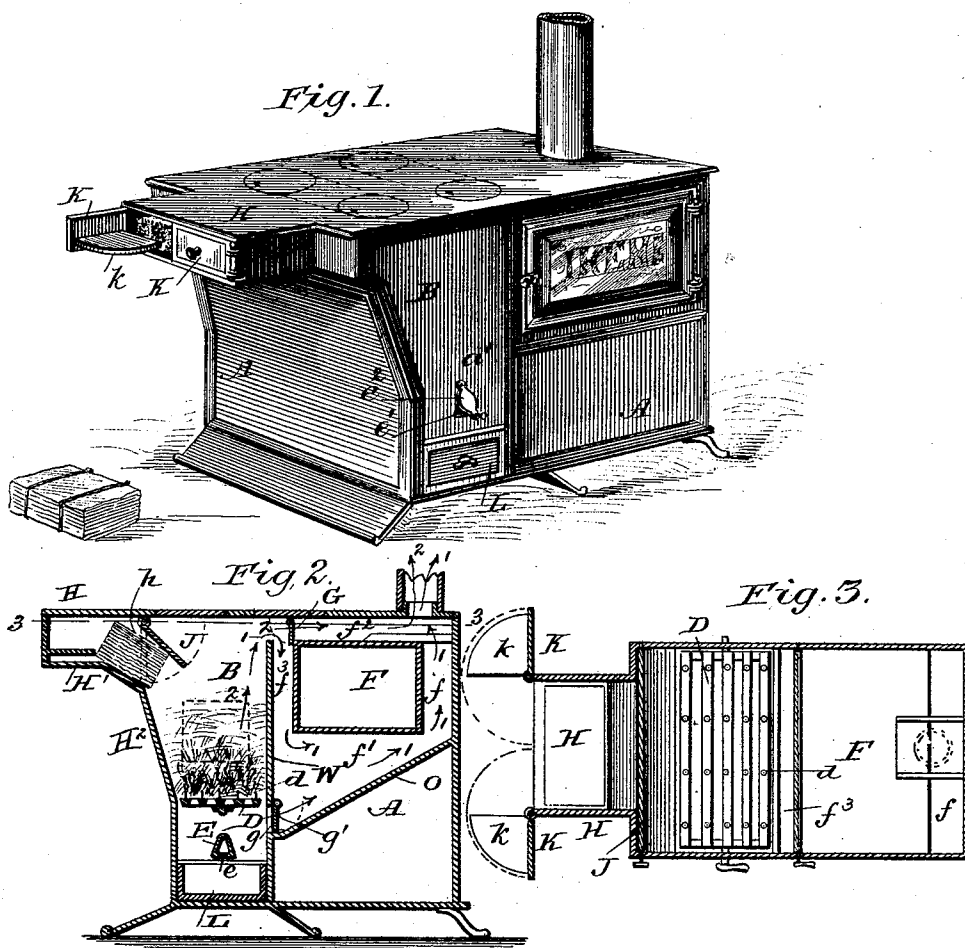


(No Model.)

J. R. TACEY & J. SHARKEY.  
STRAW BURNING STOVE.

No. 425,713.

Patented Apr. 15, 1890.



WITNESSES:  
*Fred G. Dieterich*  
*Fred H. Stearns*

INVENTOR  
*John R. Tacey*  
*John Sharkey*  
BY *Wm. V. C.*  
ATTORNEY

# UNITED STATES PATENT OFFICE.

JOHN REUBEN TACEY AND JOHN SHARKEY, OF WINNIPEG, MANITOBA,  
CANADA.

## STRAW-BURNING STOVE.

SPECIFICATION forming part of Letters Patent No. 425,713, dated April 15, 1890.

Application filed April 4, 1889. Serial No. 306,037. (No model.)

To all whom it may concern:

Be it known that we, JOHN REUBEN TACEY and JOHN SHARKEY, residing at Winnipeg, in the county of Selkirk, Province of Manitoba, and Dominion of Canada, have invented certain new and useful Improvements in Straw-Burning Stoves, of which the following is a specification.

Our invention has for its object to provide a suitably-constructed straw-burning stove more especially adapted for burning as fuel hay, flax, or other material made into compressed shape or blocks, which may be square, oval, or round, and which are usually tied, wired, or fastened together.

To this end our invention consists in certain novel features of construction and peculiar combination of parts, all of which will be hereinafter fully described in the annexed specification and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of our improved straw-burning stove. Fig. 2 is a longitudinal section thereof. Fig. 3 is a horizontal section of the same, taken on the line 3 3, Fig. 2.

In the accompanying drawings, A indicates the stove, which may be formed of cast-iron, plate, or other suitable material, and constructed of substantially the shape shown. In the front part of the stove is arranged the fire-box B, which is provided with a tilting grate D of any suitable construction, such grate being preferably provided upon its upper surface with prongs or spikes *d* for effectively stirring up the fuel when said grate is rocked. Below this grate is disposed a draft-tube E of any suitable but preferably conical form, which is provided with a perforated bottom *e*, and which at one end registers and communicates with a draft-opening *e'*, formed in the side wall *a'* of the stove, and which is provided with a suitable cut-off slide *e<sup>2</sup>* for regulating the draft.

L denotes the ash-box.

F indicates the oven, located at the rear of the fire-box, which is surrounded by draft-flues *f f'* *f<sup>2</sup>* *f<sup>3</sup>*, as most clearly shown in Fig. 2 of the drawings. The flues *f'* and *f<sup>3</sup>* com-

municate at their lower end with the fire-box B below the grate through an opening *g*, which is provided with a damper *g'*. The upper end of the flue *f<sup>3</sup>* also communicates with the flue *f<sup>2</sup>*, a damper G being provided at the juncture of said flues. By the aforesaid construction it will be seen that when the damper G is closed and the damper *g'* is opened a portion of the hot air will pass up through the opening *g*, while the products of combustion will pass up over the inner wall W of the fire-box B and down and around the oven F, as indicated in arrows 1 1 in Fig. 2. It will also be seen that when an indirect draft is used the heavy particles of combustion will fall on the inclined bottom O of the fuel-chamber and be discharged through the opening *g* into the ash-box L. By closing the damper *g'* and opening the damper G a direct draft is obtained, as shown by arrows marked 2 2 in Fig. 2. The upper front portion of the stove is extended forwardly, as at H, which forms a fuel-receiving chamber, the bottom of which is formed of a horizontal portion H' and a downwardly-inclined portion H<sup>2</sup>, as most clearly shown in Fig. 2 of the drawings. The front wall of said chamber is composed of two hinged doors K K, which are provided with inwardly-extending flanges *k k*, as shown.

J denotes a gravity or swinging damper, which normally closes the communicating opening *h* between the fire-box and the fuel-chamber H.

The manner of supplying the fuel to the stove is as follows: The fuel, which consists of compressed blocks of straw, flax, &c., is fed to fire-box by first opening the doors K and inserting one of the blocks in the chamber H. Now, when the doors are closed in, the projections *k* will push the block onto the inclined portion H<sup>2</sup> and cause it to slide through the opening *h*, lift the damper J in its movement, and fall into the fire-box B, the damper J falling back in place and closing the opening *h*, thereby cutting off communication between the fire-box and the chamber H.

If desired, a supplemental chamber may be formed in the lower part of the stove to form a suitable receptacle for the fuel-blocks.

From the foregoing description, taken in connection with the drawings, the advantages of our improved stove will be readily understood. It will be seen that the same is exceedingly simple in operation and construction, cheap as to cost, and very effective for its desired purpose.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a straw-burning stove, the combination, with the fire-box, of a fuel-chamber connected with the fire-box and disposed laterally thereto, and a door or doors hinged to the open end of said fuel-chamber, provided with inwardly-projecting portions, substantially as and for the purpose described.

2. In a straw-burning stove, the combination, with the fire-box, of a fuel-chamber connected with the fire-box and disposed laterally thereto, a gravity cut-off damper for closing the opening between said chamber and fire-box, a door or doors hinged to the front wall of said chamber, having inwardly-projecting portions, said doors adapted to push the fuel-block past the said gravity-damper when closed in, substantially as and for the purpose described.

3. The combination of the fire-box B, the

fuel-chamber H, provided with a downwardly-inclined portion, as H<sup>2</sup>, and opening laterally into the fire-box, a gravity-damper J, arranged at the juncture of said chamber and fire-box, and doors provided with inwardly-extending projections arranged on the front wall of said chamber, said doors adapted to push the fuel-blocks onto the incline H<sup>2</sup> and past the gravity-damper J, substantially as and for the purpose specified.

4. The hereinbefore-described improvements in straw-burning stoves, consisting of a fire-box provided with a lateral fuel-chamber at the upper end, doors hinged to the outer wall of said chamber, provided with inwardly-projecting portions, as *k k*, adapted to push the fuel-blocks into the fire-box when the doors are closed in, the draft-flue E, disposed below the grate of the fire-box, the oven F, flues *f f' f<sup>2</sup> f<sup>3</sup>*, communicating with the fire-box, as shown, and the dampers *G g'*, for changing the directions of draft, all arranged substantially as and for the purpose described.

JOHN REUBEN TACEY.  
JOHN SHARKEY.

Witnesses:

N. MCBAIN,  
W. E. HODDER.