L. L. CULVER.

OVEN SHELF. No. 306,323. Patented Oct. 7, 1884. Fig. Z. ${\cal B}$ Fig. 8. Fig.3. Fig. 6. Fig. 7. Fig. 6 Attest; Charles Pickles Geolecheeloch Inversion; Fig.IS By Knight Brog

UNITED STATES PATENT OFFICE.

LUCIUS L. CULVER, OF ST. LOUIS, MISSOURI.

OVEN-SHELF.

SPECIFICATION forming part of Letters Patent No. 306,323, dated October 7, 1884.

Application filed November 16, 1883. (No model.)

To all whom it may concern:

Be it known that I, Lucius L. Culver, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Oven-Shelves, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which-

Figure 1 is an elevation of a door and frame of a range or stove, and an end or edge view of the shelf, and a perspective view of my improved device for raising the shelf. Fig. 2 is a section taken on line 2 2, Fig. 1, show-

15 ing the shelf and cam in top view. Figs. 3, 4, and 5 are sections taken on line 3 4, Fig. 1, showing different positions of the shelf and cam, Fig. 3 showing the shelf down with the cam against it, Fig. 4 showing the shelf partly 20 raised, and Fig. 5 shows it raised, all these figures being top views of the cam. Figs. 6, 7, and 8 are front views showing the same parts in the same positions as Figs. 3, 4, and 5, Fig. 8 being a section taken on line 88, 25 Fig. 5. Fig. 9 is a detail bottom view of the

shelf, showing the grooved projection for receiving the cam. Fig. 10 is a section taken on line 10 10, Fig. 9. Fig. 11 is a top view of the cam and a section of the device for securing in the cam and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the device for securing in the came and a section of the came and a section o 30 ing it to the door, taken on line 11 11, Fig. 12; and Fig. 12 is a side view of the cam and

plug, taken on line 12 12, Fig. 11.

My invention relates to a device for raising oven-shelves as the doors are closed; and my 35 invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents the door of a range or stove, and B the oven-shelf, 40 hinged to fold upward, both of which may be of any ordinary construction, except the shelf has a grooved projection, C, cast upon or secured to its under side to receive the cam.

D represents a cam pivoted to the door by 45 means of a plate, H, having projections I, between which the cam fits, and is held by jour-

nal teats or projections J. (See Fig. 11.) The cam is put in place before the plate is secured to the door, and is held to its place by a plug, L, (see Figs. 11 and 12,) which is inserted be- 50 hind it, and which is shaped, as shown in Fig. 12, to form journal-bearings for the backs of the teats or projections J. The cam has an inclined portion, N, and a horn or projection, The inclined part first comes in contact 55 with the shelf as the door is closed, and raises it to the position shown in Figs. 4 and 7, and then the projection reaches the shelf, which causes the cam to turn on its pivot, and the shelf is then raised the balance of the way by 60 a direct push of the outer end of the cam, (the end of the portion N,) the result being that there is no friction in raising the shelf the greater part of the distance. The groove in the projection secured to the under side of the 65 shelf should be so shaped that it will retain the end of the cam and not allow it to slip out. The form of this groove is fully illustrated in Figs. 9 and 10.

I claim as my invention— 1. In combination with an oven door and shelf operated thereby, a cam hinged to the door, and adapted to turn on its pivot as the shelf is raised by closing the door, substan-

tially as set forth.

2. In combination with an oven door and shelf, a projection formed upon or secured to the bottom of the shelf, and provided with a groove, and a cam pivoted to the door, and provided with an inclined projection and a 80 horn, arranged and operating substantially as set forth.

3. In combination with an oven door and shelf, the cam pivoted to the door by means of a plate having projections between which 85 the cam fits and is held from moving inward by a plug, substantially as and for the purpose set forth.

LUCIUS L. CULVER

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In presence of— SAML. KNIGHT. GEO. H. KNIGHT.