

(No Model.)

C. TRAFTON.
GOLD SAVING DEVICE.

No. 430,305.

Patented June 17, 1890.

Fig. 1.

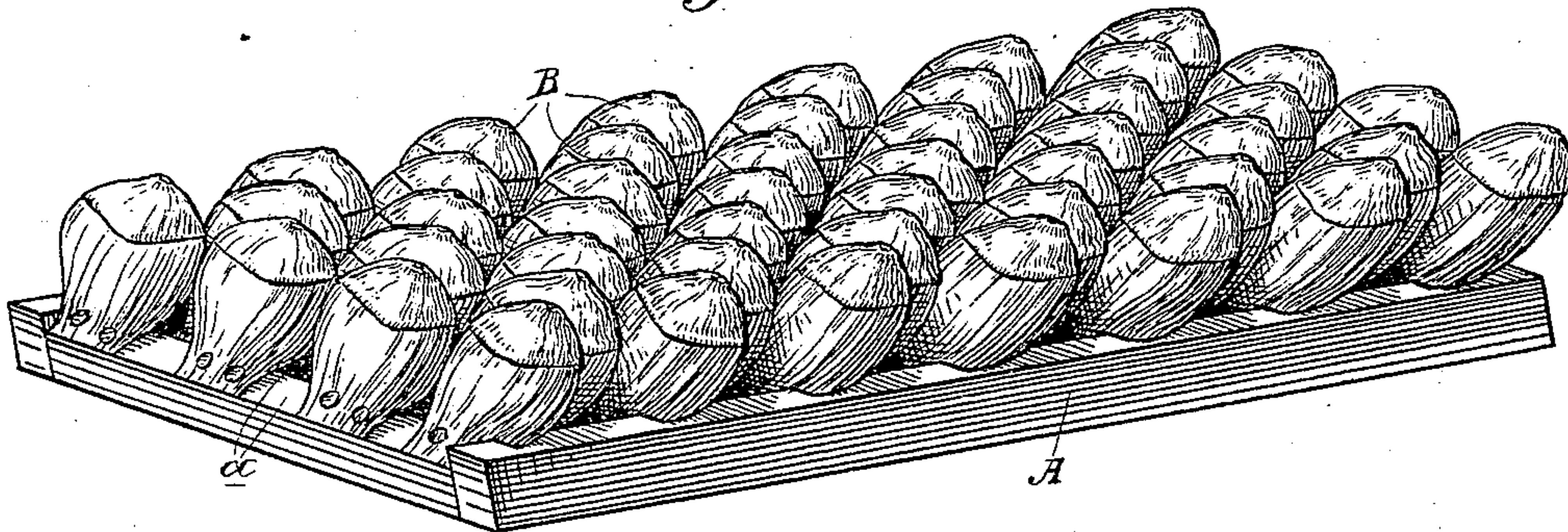
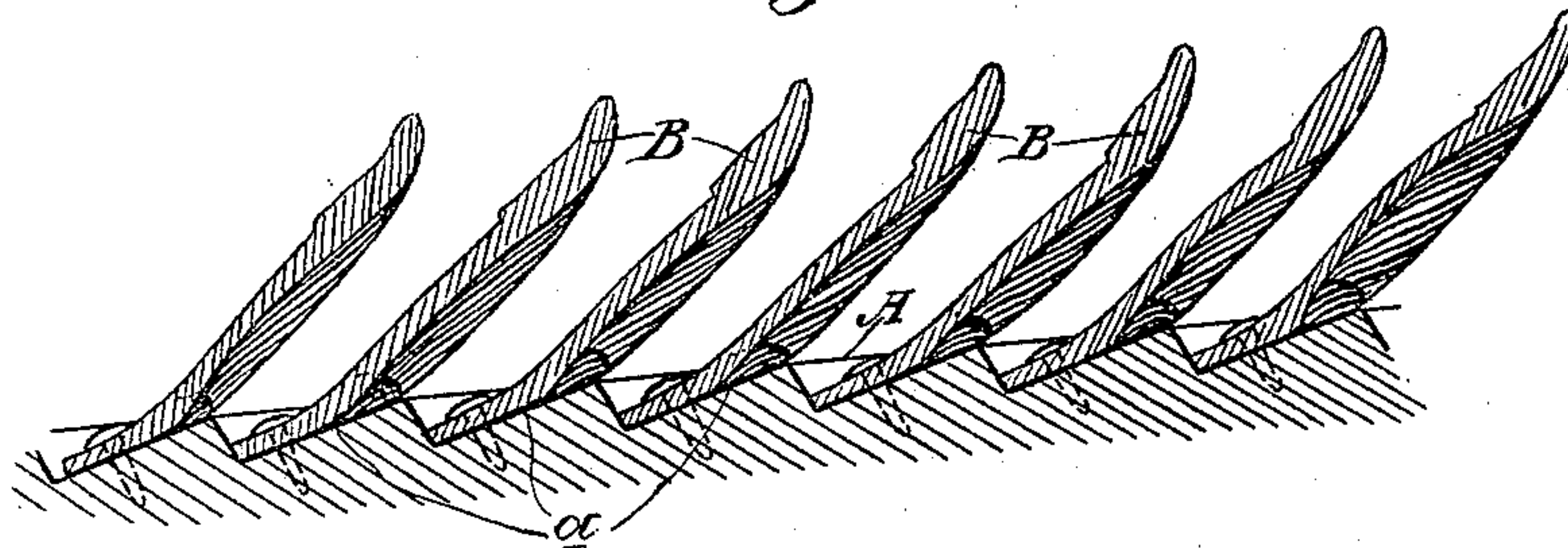


Fig. 2.



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UNITED STATES PATENT OFFICE.

CHARLES TRAFTON, OF YANKEE JIM'S, CALIFORNIA.

GOLD-SAVING DEVICE.

SPECIFICATION forming part of Letters Patent No. 430,305, dated June 17, 1890.

Application filed March 3, 1890. Serial No. 342,452. (No model.)

To all whom it may concern:

Be it known that I, CHARLES TRAFTON, a citizen of the United States, residing at Yankee Jim's, Placer county, State of California, have invented an Improvement in Gold-Saving Devices; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of gold-saving apparatus; and it consists in the novel concentrating or gold-catching surface, herein-after fully described, and specifically pointed out in the claims.

The object of my invention is to provide a simple and effective ore concentrating or catching surface.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a perspective view of my concentrating-surface. Fig. 2 is a longitudinal section of same.

A is a frame or table of any suitable character. Over the surface of this frame or table are secured in any suitable manner, as by nailing or tacking, the scales B of the cones of the coniferæ order. I do not confine myself to the scales from the cones of any particular tree of this order. For some work—as, for instance, for coarser material—I would prefer to use the scales of the larger cones, such as are borne by the digger and the sugar pine. For lighter work I would use the scales of smaller cones, as of the spruce, and in some instances I may use the scales of the cones of the fir and hemlock. These scales are closely set over the surface of the frame or table A, somewhat after the manner of shingles, though not necessarily in the regular rows or lines of shingles, but in such sort as to fully cover the frame or table surface, the scales overlapping each other. They may be secured upon a perfectly-plain surface, or upon a surface formed with inclines *a*, such as is here shown. In either case—on account of the peculiar shape of the scales—they do not lie flat and close upon one another, as do shingles, but their free points or ends are separated from the bodies of the scales which they overlap, and especially is this separation noticeable where the scales are set to break joints, as it were, in succeeding rows, because of the lateral convexity of the scale, a space being left between the points of

the overlapping scales and the meeting edges of the underlying scales. This separation is more noticeable, however, in the form here shown, where the scales are attached to inclines *a*. The surface thus provided is a very rough one, having deep interstices and spaces. The utility of the surface for the purpose intended lies in this fact to a great extent, as the heavier particles are caught in the interstices or spaces between the scales, which thus form riffles, while the lighter particles are washed off, it being understood that the table or frame is a washing-table, and water is to be used in connection with the ore. The water and ore flow over the surface in a direction against the raised or free ends of the scales.

The table or frame which I have here shown is intended to be one of a series of similar tables or frames to be placed in the sluice; but it is obvious that the same surface may be made within a properly or differently constructed frame having sides sufficiently high to form a channel for itself. These are details which are not essential to my present invention. The utility of this surface is not confined, however, to its roughness, but is due also to a peculiarity of the scale which develops itself after wear.

The upper or outer surface of the scale has a skin, which upon exposure, or by reason of friction and wear breaks off in scaly bits, leaving underneath a fibrous kind of body, which serves excellently as a concentrating-surface on account of its roughness. It is therefore a fact that after the scales have been in use for a time the skins peel off and wear away, leaving this fibrous or roughened surface of the scale exposed, and the whole surface is thereby rendered more effective than it was at first. I have found by actual experience that this form of concentrating or catching surface is very effective. It is, moreover, simple and economical in its construction, and is practical in its operation. The surface may be readily washed and cleaned when desired. The scales may be stripped from the table and washed, and then by burning them all material which still clings to them after the washing may be saved.

The scales will last several months of constant use, and when worn out, or when de-

stroyed for the purpose of saving the precious material which they have caught, others may be readily substituted.

5 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

10 1. In a concentrating or gold-saving surface, the scales of the cones of coniferous trees secured to said surface and forming the retaining or concentrating riffles, substantially as herein described.

2. A concentrating or gold-saving surface formed of the scales of the cones of coniferous trees, substantially as herein described.

15 3. A concentrating or gold-saving surface formed of a number of scales of the cones of

coniferous trees, said scales being arranged to overlap each other, substantially as herein described.

4. A concentrating or gold-saving surface 20 composed of the scales of the cones of coniferous trees, said scales being arranged at an upward inclination, their free ends opposing the flow of the material over them and overlapping each other, substantially as herein de- 25 scribed.

In witness whereof I have hereunto set my hand.

CHARLES TRAFTON.

Witnesses:

R. M. JONES,

A. G. READ.