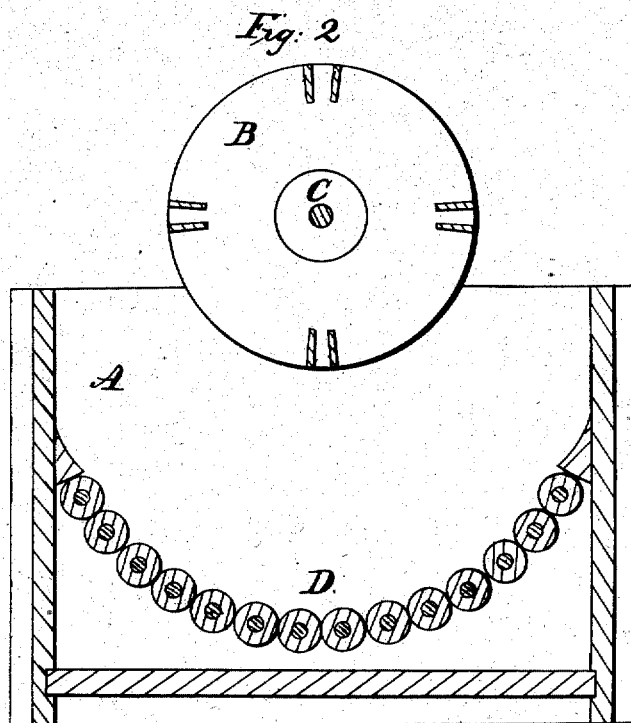
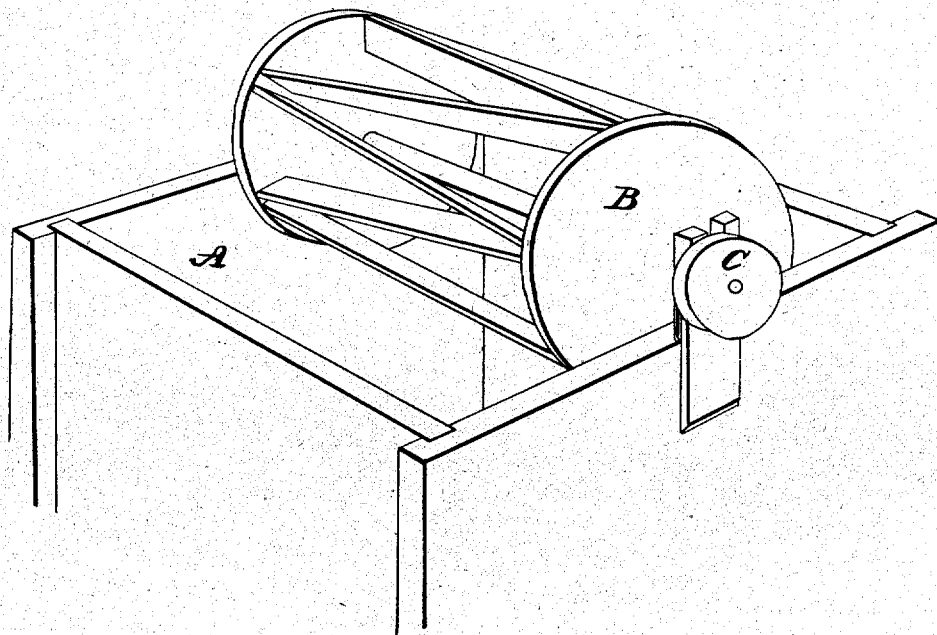


J. R. Innis,
Tanning Hides,
Nº 7,192, *Patented Mar. 19, 1850.*
Fig. 1



UNITED STATES PATENT OFFICE.

JAMES R. INNIS, OF EASTON, PENNSYLVANIA.

BEATER IN HIDE-HANDLING CYLINDERS.

Specification of Letters Patent No. 7,192, dated March 19, 1850.

To all whom it may concern:

Be it known that I, JAMES R. INNIS, of Easton, in the county of Northampton and State of Pennsylvania, have invented a new and useful Improvement in Handlers for Tanning Hides which I Term My "Improved Rotary and Reciprocating Handler"; and I hereby declare that the following is a full and exact description thereof.

10 In the accompanying drawings which form a part of this specification Figure 1 is a perspective view of the machine which is placed in an ordinary vat. A vat which is usually about six feet long, four feet wide
15 and five feet deep and sunk nearly the whole depth in the earth. B wheel with buckets placed diagonally across the face from right to left and left to right. C pulley on wheel shaft. Fig. 2 end elevation A vat. B wheel,
20 C pulley, D rollers running across the vat, parallel to the shaft of wheel B; these rollers should be sufficiently far apart to allow the liquor to flow freely from the chamber under the rollers to the main portion of the vat
25 above the rollers, in which the hides are placed. The object of these rollers is to allow the liquor to pass up freely through the spaces, which will prevent the hides from adhering to the bottom of the vat, and
30 also the hides will move more freely than they would on a plain surface or where the liquor could not have free access to the under side of the hides, this object may be partly accomplished by using slats or grates
35 in the place of the rollers.

Having described the construction of improved handler, I will proceed to describe its operation. The hides are taken from a lime vat or sweat pit (in which they are
40 first put to remove the hair) and placed in the vat under the wheel and above the rollers, the hides do not pass over the wheel but float about in the vat. By turning the wheel B the buckets being arranged as above
45 described. It will give a reciprocating motion to the liquor from right to left and left to right and it will also cause a current of liquor to pass down at the tail end of the vat and rise up through the spaces between
50 the rollers thereby keeping a current of liquor flowing in different directions, which will cause the hides to spread out and allow the liquor free access to the surface and pores of the hides. The buckets being placed
55 diagonally across the surface of the wheel it will require much less power to turn the wheel; there will be less liability of the bands being thrown off the pulley and the

liquor will foam less than with a wheel where the whole length of bucket strikes the liquor at the same instant. 60

Having thus fully shown the construction and operation of my improved rotary and reciprocating handler what I claim as new and of my invention and desire to secure by Letters Patent is— 65

1. The wheel having buckets diagonally across the surface alternately from right to left and left to right.

2. The rollers or slats in combination with the chamber, substantially in the manner and for the purpose set forth. 70

JAMES R. INNIS.

Witnesses:

WM. H. HUTTER,
PETER BELLIS.

75

Disclaimer.

To the Commissioner of Patents:

The petition of JAMES R. INNIS, of Easton, in the State of Pennsylvania, respectfully represents that on his petition made and entered in the Patent Office Letters Patent were issued to him for certain Improvements in Tanning Hides, which he termed his "Rotary Reciprocating Handler," which Letters Patent bear date the nineteenth day of March, one thousand eight hundred and fifty; that since the issue of said Letters Patent he has reason to believe that through inadvertence and mistake the claims made in the specification are too broad and therefore cover more than he is entitled to as first inventor.

Your petitioner therefore hereby enters his disclaimer to that part of the claim in the aforementioned specification which is in the following words, to wit: "Second, the rollers or slats in combination with the chamber," which disclaimer is to operate to the extent of the interest in said Letters Patent vested in your petitioner, he having paid ten dollars into the Treasury of the United States agreeably to the act of Congress in that case made and provided.

Dated at the city of New York on the ninth day of November, in the year one thousand eight hundred and fifty.

JAMES R. INNIS.

Witnesses:

JOSEPH P. PIRSSON,
S. H. MAYNARD.