

UNITED STATES PATENT OFFICE.

STEPHEN J. PATTERSON, OF BRIDGEPORT, CONNECTICUT.

PREPARING JAPANNED AND ENAMELED LEATHER.

SPECIFICATION forming part of Letters Patent No. 282,664, dated August 7, 1883.

Application filed January 27, 1883. (Specimens.)

To all whom it may concern:

Be it known that I, STEPHEN J. PATTERSON, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented a certain new and useful Improvement in Preparing the Cut Surface of Split Leather for Manufacturing Japanned and Enameled Leather; and I do hereby declare that the following is a full, clear, and exact description thereof.

My improvement consists in forming an artificial grain on the hide after it has been buffed or split with a regular splitting-machine. If a heavy buffin be taken off, it leaves the surface fibrous and coarse, and it is necessary to have a smooth surface to finish on—that is, to japan or enamel.

My improvement is as follows: When the split hide comes from the tan-liquor after the tanning operation is completed, it is slicked out on a table and a light coat of oil spread over the surface with a sponge or soft brush. Then it is tacked on a frame, and while still wet I brush the fiber or nap of the freshly-cut surface down smooth in one direction with a flexible-bristle brush, (like a shoe-blackening brush, but larger,) which simply gives direction to the fiber or nap; and I apply, while the hide is still wet, with the same brush or with a sponge, rubbing in the same direction, a coat of composition made from linseed-oil boiled down to a jelly and reduced with naphtha or turpentine to the proper consistency. After this application I repeat the brushing operation as before. The hide is now left to dry, and when dry the composition holds the fiber or nap in place, and the leather has a smooth surface to japan or enamel. When dry it is finished the same as other japanned or enameled leather. The hide is not dubbed with a mixture of cod-oil and tallow or other grease, as in the ordinary method of preparing heavy leather. For shoes and harness only a light coat of oil is applied, as stated. It is buffed or split with the splitting-machine when about one-third tanned.

For treatment by my improved process, I take off a heavy buffin with the largest size improved "Union Splitting-Machine," making a buffin about three-fourths the size of the hide.

This is thick enough to japan for shoe-leather or other similar purposes, and will bring from four to eight dollars when finished. The extra expense will not exceed one per cent. of the cost of the hide.

The common way of buffing the hide or preparing it for japanning or enameling is either by shaving off the inequalities with a currying-knife or by taking off a light buffin with the regular splitting-machine. This light buffin, when finished, is of little value, bringing from one to three dollars. Now, the way japanned or enameled leather is commonly treated is by applying all the coats of the composition to the leather after being tanned, and when perfectly dry on the frames. The naphtha or turpentine in the composition is then absorbed by the dry leather, and it becomes dry and harsh; but by applying, as I do, the first coat of the composition when the leather is wet and the pores filled with tan-ooze, the naphtha or turpentine evaporates before the leather becomes dry, and is not absorbed by it, and the leather is left soft and flexible and more easily worked.

My process of treatment applies equally well to light buffins or splits, but is especially adapted to heavy ones by largely increasing their value.

What I claim, and desire to secure by Letters Patent, is—

The process of preparing the cut surface of split leather for manufacturing japanned and enameled leather, which consists in brushing the fiber or nap of split leather down smooth in one direction with a flexible-bristle brush while the leather is in a wet state, just after being tanned, and applying with a sponge or brush to the cut surface a mixture of boiled oil and naphtha or turpentine, and brushing it again in the same direction while the leather is still wet, to hold the fiber or nap in place and make a smooth surface to japan or enamel when dry.

In testimony whereof I affix my signature in presence of two witnesses.

STEPHEN J. PATTERSON.

Witnesses:

FRANK J. HUGHES,
V. R. C. GIDDINGS.