

UNITED STATES PATENT OFFICE.

THEODORE FREDERICK COLIN, OF BODINE, PENNSYLVANIA.

MANUFACTURE OF TANNING EXTRACT.

SPECIFICATION forming part of Letters Patent No. 313,177, dated March 3, 1885.

Application filed July 8, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, THEODORE F. COLIN, a citizen of the United States, and a resident of Bodine, in the county of Lycoming and State of Pennsylvania, have invented certain new and useful Improvements in the Manufacture of Tanning Extracts; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the manufacture of tanning extract from bark; and it consists in the improved process of evaporating the liquor, as hereinafter more fully described and claimed. In this process the liquor is contained in a vacuum-pan of any desired construction having a condenser, and a stream of a mixture of carbonic-acid and sulphurous-acid gases and steam is introduced through the liquor. After the steam has assisted in heating the liquor the carbonic-acid and sulphurous-acid gases are continued to be introduced through the liquor, while the steam is stopped, and only admitted at times, when, at a later stage of the evaporation, the liquor becomes so thick as to prevent the gases from passing freely through it and clog the passage up through which the said steam passes, thus serving to clear the passage. The carbonic acid, being heavier than the air, will remain in a layer over the liquor after having carried the air contained in the liquor off by passing through it, thus preventing the air from reaching the liquor after having once been driven

off, and the sulphurous acid will prevent oxidation of the liquor by the air, and by combining with the air it will form sulphuric acid, which will serve to improve the liquor, although only appearing in a very small proportion. After the liquor has been evaporated the result or product is a dry substance of a red color, which may be dissolved in water and reproduce the original tan-liquor.

I am aware that sulphurous acid has been used for the purpose of digesting bark for tan-liquors, and I am also aware that tan-liquor has been evaporated in vacuum-pans, and I do not wish to make any broad claims either for the process of using sulphurous acid in the manufacture of tan-liquor, nor for the old and well-known process of evaporating liquids in a vacuum-pan; but

I claim—

The process of making tanning extracts which consists in passing carbonic-acid and sulphurous-acid gases and steam through the bark-liquor contained in a common vacuum-pan, thereupon shutting off the steam, and at intervals introducing small quantities of steam, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

THEODORE FREDERICK COLIN.

Witnesses:

AUGUST PETERSON,
D. E. McELHINNY.