

UNITED STATES PATENT OFFICE.

OTTO CASSEL, OF VIENNA, AUSTRIA-HUNGARY.

PROCESS FOR MANUFACTURING CRUDE-OIL SOAP.

1,007,531.

Specification of Letters Patent.

Patented Oct. 31, 1911.

No Drawing.

Application filed May 17, 1910. Serial No. 561,871.

To all whom it may concern:

Be it known that I, OTTO CASSEL, subject of the Emperor of Germany, residing at Vienna, in the Empire of Austria-Hungary, have invented certain new and useful Improvements in the Process for Manufacturing Crude-Oil Soap, of which the following is a specification, reference being had therein to the accompanying drawing.

The present invention relates to a process for the manufacture of crude oil soap.

It is well known that certain quantities of crude oil or the distillations obtained therefrom can be incorporated in common soaps, but the addition of considerable percentages of such oils has not however as yet been achieved.

According to the present invention it has been discovered that by the addition of montanic acid the materials employed in the usual methods of manufacturing soaps have the property imparted thereto, of being able to absorb exceedingly large percentages, up to 200% by weight of refined or unrefined crude oil or its distillates.

As a formula for execution I give the following example: 20 parts of caustic soda are dissolved in 100 parts of water and into the obtained solution are stirred, while warm, 20 parts of rosin and 10 parts of montan wax. When the montan wax has been completely dissolved through boiling 100 parts (or a percentage up to 200% of the soap base) of refined or crude oil are added under constant stirring and the concoction is brought to boiling again.

The material known in trade by the name of montan wax contains large quantities of montanic acid and is consequently well adapted to the present purpose and the same results will ensue if instead of montanic acids the same quantity of montan wax be added. I have also found that the by-products obtained in the manufacture of montan wax or montanic acids (see German patent specification 101373 and Austrian Patent No. 1456) in consequence of the montanic acid which they contain, will react on the component substances used in soap manufacture in such a manner that the said by-products may be used in carrying

out the invention. The action of the by-products though naturally not so effective as that of montan wax or montanic acids, being nevertheless sufficient for technical purposes.

The process is carried out in the following manner: To one of the components or to the total mass, of soaps manufactured according to known processes montanic acid is added, thus enabling up to 200% of crude oil or its distillates to be absorbed.

As has been described above montan wax may be used instead of montanic acid or even the by-products referred to above obtained in the manufacture of montan wax. It is, however, evident that the quantity of montan wax added must be greater than if pure montanic acid were employed and likewise the amount of by-products added must be greater than if montan wax were added.

Soaps prepared according to this process hold the crude oil in an extremely finely divided condition, consequently will lather well and may be diluted with almost any amount of water. Soap of this kind has considerable cleansing power and may therefore be employed for removing varnishes and paints. Owing to the above mentioned property of being able to stand almost unlimited dilution with water the soap is extremely suitable for street sprinkling purposes.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:

1. The herein described process for the manufacture of crude oil soap, which consists in adding montan wax to the soap substance before combining with crude oil.

2. The herein described process for the manufacture of crude oil soap, which consists in adding by-products containing montan wax to the soap substance before combining with crude oil.

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

OTTO CASSEL.

Witnesses:

FRIEDRICH BINDER,
AUGUST FUGGER.