UNITED STATES PATENT OFFICE

MARSHALL TURLEY AND JOHN FLEMING, OF COUNCIL BLUFFS, IOWA.

IMPROVEMENT IN SOAP.

Specification forming part of Letters Patent No. 182,247, dated September 12, 1876; application filed March 7, 1876.

To all whom it may concern:

Be it known that we, MARSHALL TURLEY and JNO. FLEMING, of Council Bluffs, in the county of Pottawattamie, and in the State of Iowa, have invented certain new and useful Improvements in Compound for Making Soap; and do hereby declare that the fellowing is a full, clear, and exact description thereof:

The nature of our invention consists in a soap formed of the glutinous matter of grain, an oily substance, and an alkali, as will be hereinafter more fully set forth.

In the manufacture of this soap the grain, whether wheat, rye, or barley, is ground and bolted. We then take the shorts and bran and soak them in water, and leach or press the glue out, which yields about eighty per cent. of glutinous matter. This matter has a washing and bleaching quality, and has a great affinity for alkalies, and might therefore be made into soap without any other ingredi-

ents. But as the soap would then be too tough and soft, we add grease, oil, or tallow to the glutinous matter in the proportion of one to three, and enough alkali to saponify the same. This soap may be made in a few hours after heat is applied.

Having thus fully described our invention,

what we claim as new, and desire to secure by

Letters Patent, is-

A soap formed of the glutinous matter of grain, an oily or fatty substance, and an alkali, substantially as herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 26th day of February, 1876.

> MARSHALL TURLEY. JOHN FLEMING.

Witnesses:

I. LYMAN, JOHN W. BAIRD, D. W. OTIS.