## UNITED STATES PATENT OFFICE.

GEORGES PELTZER, OF VERVIERS, BELGIUM.

## PROCESS OF EXTRACTING FAT FROM WOOL.

SPECIFICATION forming part of Letters Patent No. 679,777, dated August 6, 1901.

Original application filed August 29, 1900, Serial No. 28,448. Divided and this application filed May 10, 1901. Serial No. 59,694. (No specimens.)

To all whom it may concern:

Be it known that I, Georges Peltzer, a citizen of Belgium, residing at Rue David, Verviers, in the Kingdom of Belgium, have 5 invented a certain new and useful Process for the Removal of Fat from Raw Wool, (for which I have applied for a patent in Belgium, dated February 2, 1900, No. 147,678, and March 26, 1900, No. 148,782, and in Great 10 Britain, dated February 6, 1900, No. 2,360,) of which the following is a specification.

This invention, which was originally included in my application, Serial No. 28,448, filed on August 29, 1900, which application 15 matured into a patent, No. 675,405, dated June 4, 1901, relates to a process for removal of fatty matters from raw wools by means of carbon tetra chlorid, the use of which solvent presents great advantages over the processes at 20 present in use.

First. It permits, in comparison with ordinary washing, an easy recovery of the product employed and of the fat extracted from

the material treated.

Second. It gives absolute safety, owing to its being neither inflammable nor explosive as compared with the use of naphtha, benzin, petroleum, or like products, which are dangerous in the liquid condition, and also in that 30 of vapor by reason of the formation of an explosive mixture with air. The carbon tetra chlorid does not require the isolation of the rooms in which it is employed or any increase of insurance premium.

Third. The treatment can be applied to wet wool, so that wool after it has been freed from potash can be treated at once without any preliminary or intermediate dryings, which are required when other solvents are em-40 ployed and which involve labor, expense, and

delay.

Fourth. The process can be applied to small quantities of wool as economically as to large

quantities.

Fifth. When the process is adopted, wool | nesses. can be treated continuously—that is to say, freed from potash and from fatty matters and clean scoured—these successive operations being carried on without any handling of the 50 wool, an advantage which cannot be obtained

when there is treatment in closed vessels.

In employing carbon tetra chlorid as a solvent for the fatty matters contained in wool I take advantage of the fact that the specific gravity of the solvent is considerably greater 55 than that of water, so that while it is acting on the wool it can be quite covered by a layer of water, which prevents its evaporation. I can thus effect removal of fatty matters from wool in almost any of the well-known appa- 60 ratus for washing wool, which consist of a tank along which the wool is propelled while it is agitated with feeding-rollers at the one end and squeezing discharge-rollers at the other end. All that I have to do is to sub- 65 stitute for the liquid usually employed in wool-washing a quantity of carbon tetra chlorid, which is protected against loss by evaporation by a quantity of water which forms a layer above the tetra chlorid. The wool as 70 it is agitated and propelled through the tetra chlorid under water has the fatty matters dissolved out of it, these forming a solution with the carbon tetra chlorid, from which they can afterward be separated by distillation in 75 the usual way, the solvent being recovered, so that it can be used again in the same way. Such portions of the solvent as adhere to the wool can be distilled off by passing the wool to a heated space after its treatment.

I am aware that it has been proposed to extract oil from seeds and the like by treating them with carbon tetra chlorid, and therefore I make no general claim to the use of this substance as a solvent; but,

Having thus described the nature of my invention and the best means I know of practically carrying it out, I claim—

The herein-described continuous process for removing fatty matters from raw wool by 90 agitating the wool in carbon tetra chlorid, protected by a layer of water from loss by evaporation.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 95

GEORGES PELTZER.

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Witnesses:

C. R. CENTNER, M. Brahe.