

# UNITED STATES PATENT OFFICE.

FRANK STAINES, OF MELBOURNE, VICTORIA, AUSTRALIA.

PROCESS TO FACILITATE THE SHELLING OF PEAS AND THE LIKE.

No. 870,855.

Specification of Letters Patent.

Patented Nov. 12, 1907.

Application filed May 18, 1906. Serial No. 317,527.

*To all whom it may concern:*

Be it known that I, FRANK STAINES, a subject of the King of Great Britain, residing at No. 290 Collins street, Melbourne, in the State of Victoria, Australia, 5 manager, have invented an Improved Process to Facilitate the Shelling of Peas and the Like, of which the following is a specification.

With apparatus at present in use for this purpose the pea pods are generally fed to rollers between which 10 the pods pass and are expelled on the forward side of said rollers while the peas are forced back on the rear side of same. In this operation however the peas situated in the forward position in the pod become crushed or broken, and it is with the object of avoid- 15 ing this that I have devised the present invention.

My process consists in heating the pea pods preferably by steeping same for a few minutes in water or other suitable fluid raised to a temperature of about 120 F. before subjecting them to the shelling rollers.

20 By this process the air inside the pod becomes expanded and acts as a cushion and as the rollers begin to squeeze the forward end of same the other end bursts open and the peas are shot out without being bruised or damaged in any way.

25 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. An improved process to facilitate the shelling of peas and the like, consisting of heating the pods containing the 30 peas in a fluid at a moderate temperature, thereby expanding the air in the pod without causing its escape, and putting it under tension, then subjecting a portion of the pod to pressure, thereby splitting the pod and ejecting the peas by means of the escaping air. 35

2. An improved process to facilitate the shelling of peas and the like, consisting of subjecting the pods containing the peas to a moderate increase of temperature, thereby 40 expanding the air in the pod and putting it under tension, then subjecting one end of the pod to pressure, thereby increasing the air pressure within and splitting the pod and ejecting the peas by means of the escaping air. 45

3. An improved process to facilitate the shelling of peas and the like, consisting of subjecting the pods containing the peas to a temperature in the neighborhood of 120°, 45 thereby expanding the air in the pod and putting it under tension without causing it to escape, then subjecting one end of the pod to pressure between rollers increasing the air pressure within the pod whereby the portion of the pod 50 remote from the rollers will be split open and the peas ejected by the escaping air.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK STAINES.

Witnesses:

EDWARD NEEDHAM WATERS,  
WILLIAM HERBERT WATERS.