

(No Model.)

G. DUNCKLEY.
PEA SHELLING MACHINE.

No. 534,365.

Patented Feb. 19, 1895.

UNITED STATES PATENT OFFICE.

GEORGE DUNCKLEY, OF PHILADELPHIA, PENNSYLVANIA.

PEA-SHELLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 534,365, dated February 19, 1895.

Application filed September 22, 1893. Renewed November 17, 1894. Serial No. 529,186. (No model.)

To all whom it may concern:

Be it known that I, GEORGE DUNCKLEY, a citizen of the United States, residing at Frankford, (Philadelphia,) in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pea-Shelling Machines; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has reference to a machine for shelling peas, and it is especially adapted for shelling them while they are in a condition known as "new" or "green;" and the invention consists in the use of a bracket-stand provided with frictional rollers.

The detail construction and operation of the several parts I will hereinafter fully describe and point out in the claim.

In the drawings herewith Figure 1, is a side elevation of the complete machine, showing it fastened upon a table or any similar support. Fig. 2, is a vertical section on line $x-x$ of Fig. 3. Fig. 3, is a rear view of the machine. Fig. 4, is a top view of the rolls and their bearings. Fig. 5, is a longitudinal section of the grooved friction roll with the cover removed. Fig. 6, is a top view of the cap for retaining the pressure spring. Fig. 7, is a side view thereof. Fig. 8, is a side view of the bearing cross bar.

Similar letters refer to like parts in the several views.

In the drawings A is a stand or bracket constructed to clamp the edge of the table or other form of support by means of the set screw a , and the stand is sufficiently high and bent forward so as to give ample reach to the top portion of the said bracket or stand, to allow the vessel to receive the peas to be placed directly under the shelling parts of the machine.

The adjustable bracket A is fork shaped at the top and each upwardly extending arm a' , a' , is provided with a slot a'' , a'' , open at the top end to receive the journals of the rolls B, C. These rolls are preferably constructed

with a core d , of wood or other hard material, and over this core is placed a covering e of flexible material, rubber to be preferred.

The construction of the upper friction roll C, differs very materially from the lower frictional roll B. The center of the core d , of the former has a circumferential groove or channel d' , of a shape to correspond in some degree with the shape of the pod containing the peas. It will be observed in this connection that the flexible covering e , of the roll C, does not conform itself in any manner to the contour of the circumferential channel or groove d' , but presents a straight face to the friction roll B, shown clearly in Fig. 3 of the drawings.

Near the top end of each of the arms a' , a' , of the bracket A, are horizontal grooves or channels a''' , a''' , which hold securely in position the cap piece f , which is provided with a pressure screw b'' , bearing on the crown of the oval spring g , which in turn bears at its outer ends on the cross-bar m , which forms the top bearing for the journals of the roll C.

In the drawings i , refers to a hopper and shield secured in any well known manner to the bracket A, which prevents the escape of the peas when being forced from the pod, and furthermore guides them into the receptacle to receive them. The trough or chute n , also secured in some well known manner to the bracket or stand A, serves to guide the pods away from the peas thereby separating the empty pods from the shelled peas.

In the operation of shelling green peas by means of this machine, sufficient pressure is first applied to the rolls by means of the pressure screw and the spring to insure sufficient friction to cause the power roll by means of the hand crank l , to revolve the upper roll. The pods containing the peas are then introduced as fast as it is practical to revolve the handle with one hand and feed the machine with the other. The flexible nature of the covering of the rolls, and the construction of the upper roll with the groove as described, will cause the rolls to accommodate themselves with sufficient force to cause the peas to leave the pod rapidly, and in regular order without mashing or destroying them.

I have found it most practical in a machine

for this purpose to construct it substantially as shown. Any connection of gears between the rolls or the use of hard or inflexible rolls, renders the latter liable to choke and further-
5 more mash and destroy the peas.

Little machinework is necessary in the fitting up of this machine. The forked end of the bracket forms a housing for the rolls, and even if made from cast iron will admit of sufficient spring to allow the cap to be placed in
10 the grooves and retained therein.

In holding the rolls in position and all of the other parts immediately connected therewith, also the hopper and chute, are so constructed and secured as to require but very
15 little cost for the machine, while at the same time making the device extremely durable.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

In a machine for shelling peas the combination of the bracket-stand *a*, having vertical slotted arms, said arms provided with horizontal grooves, cap piece *f*, spring *g*, and cross-bar *m*, with the flexible covered impinging
25 rolls B, C, the power roll B, constructed with a circumferential groove *d'* and provided with the power hand crank *l*, when the parts are constructed and arranged to operate in the manner and for the purpose set forth. 30

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

GEORGE DUNCKLEY.

Witnesses:

LEWIS F. BROUS,

GEORGE L. BATTERSBY.