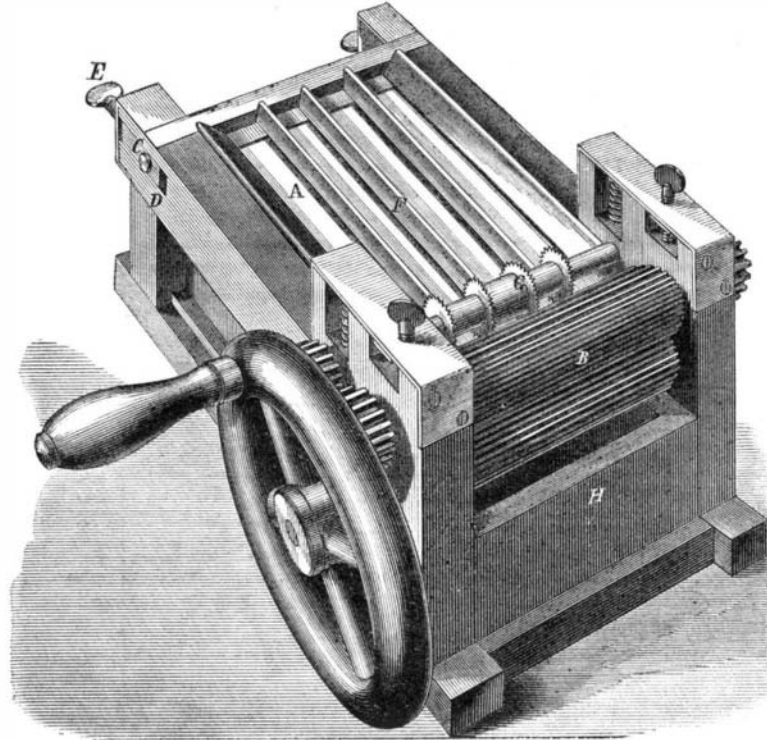


**Improved Pea Sheller.**

Where large quantities of peas and beans have to be shelled, a great deal of time is wasted or consumed which might be devoted to more important business. Inasmuch, however, as it is a very necessary duty, machines have been devised for the purpose which do it with great rapidity. In these it is only necessary to place the pods on an endless apron, when they are carried in between rollers, split open, and the contents delivered in a box below. The engraving published herewith represents such a machine.

The endless apron spoken is at A, and passes over two rotating shafts, one at each end. One of these is driven by a gear wheel meshing into another on the end of the splitting rollers, B, and the other shaft runs in a box, C, at the extreme end of the machine. This box is capable of being moved in a slot, D, by the screw, E, so that as the apron becomes slack by use it may be tightened without interfering with the gearing which drives it. Just over the endless apron are guides, F, which serve to direct the peas and cause them to be delivered straight to the feed rollers, G. These are also driven by gears, and are serrated on the edge so as to catch the pods as they are presented. They also partially split or tear them, so that they are easily ruptured by the fluted rolls, B, which perform the last operation—that of completely opening the pods so that the peas or beans fall out into the case, H, below, from which they are readily removed. The distance between the rollers is regulated by the thumb screw above them, and the serrated feeding apparatus has light springs above each bearing to keep them to their work, and at the same time permit them to rise and fall.

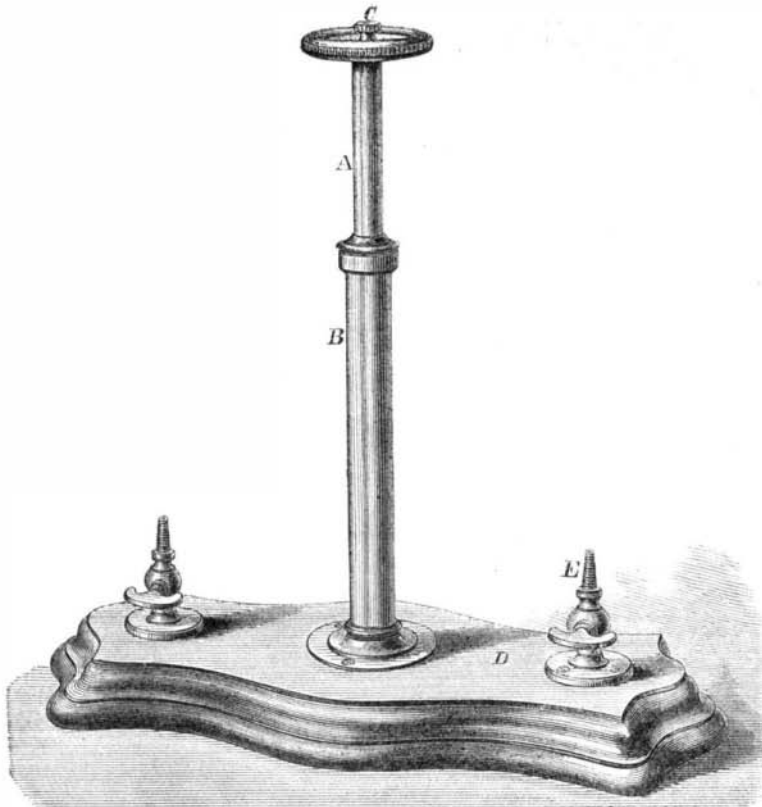


**LEWIS'S PEA SHELLER.**

Patented through the Scientific American Patent Agency Jan. 30, 1866. For further information address W. K. Lewis, No. 93 Broad street, Boston, Mass.

**Improved Pressure Test.**

This engraving represents a new instrument for testing steam gages. It is without some objections which apply to the common force pump with a reciprocating plunger and a reservoir, as it is compact, clean in operation, and without valves. Simplicity itself is embodied in this apparatus, for there are but two parts of importance, and these are seen at a glance—the plunger, A, working in the chamber, B; the plunger screws into the barrel over an upright screw, secured at the bottom. The plunger is hollow, and water, being poured in through an opening at the top (which is closed by a small screw, C), is forced by the descent of the plunger into small pipes underneath the bed plate, D. These pipes communicate with the tubes and stop cocks, E, on which the gages to be tested



**JUSTICE'S PRESSURE TEST.**

are fixed. One tube carrying the standard gage, the other the one to be tested. As water is incompressible, it follows that the pressure shown on one gage

will be the same on the other, provided the passages are equal in point of size, smoothness, and free from obstructions. This is an extremely convenient instrument for master mechanics and others to test their gages by. It was patented October 4, 1864, by Shaw & Justice. For further information address Philip S. Justice, 42 Cliff street, New York, or 14 North Fifth street, Philadelphia.

**Tubular Boilers.**

We are glad to see our cotemporaries taking up

boats who threw up his position at Vicksburg, and returned to this city yesterday, being afraid to remain longer on board.

The underwriters held a meeting here to take into consideration the propriety of following in the footsteps of the Louisville Board in refusing to insure steamboats using tubular boilers, but we are sorry to say that they have not adopted this course as yet. This decision, combined with the popular sentiment against them, would soon cause the removal of all such infernal machines. One reason assigned for the non-action of the New Orleans Board of Underwriters is the fact that the Atlantic and Mississippi Steamship Company, who owned the exploded boats Missouri and W. R. Carter, took their own risks, and as there are but three boats in the New Orleans trade except such as belong to this line which have the tubular boiler, no necessity exists for the board in this city to adopt resolutions of the kind.

A gentleman who left St. Louis a few days ago informs us that two tubular-boiler boats were at that port announced for New Orleans, but it was almost impossible for them to get either freight or passengers. Our informant states that travelers went on board, and their first question was invariably, "Have you got tubular boilers?" Upon receiving an affirmative answer, off they would go. These are the best means that can possibly be adopted for throwing such dangerous contrivances out of use. We hope travelers and shippers at other points will do likewise, until there is no such thing in the southern or western rivers, except the exploded ones at the bottom, as a tubular boiler.—*New Orleans True Delta.*

this question, and calling upon not only the public to stop patronizing boats on which they are used, but demanding that the inspectors order them removed from the vessels. The indignant feelings aroused against boats which continue to employ them is not dying out among the people as we were afraid it would, but seems daily growing stronger; and even

ONE of the annoyed remarks:—"I have often observed at public entertainments, that when there is anything to be seen, and everybody wants particularly to see it, everybody immediately stands up and effectually prevents anybody from seeing anything."



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