(12) **United States Patent**
Rice

(10) **Patent No.: X6240**
(45) **Date of Patent: Nov. 11, 1830**

(54) **CIDER MILL**

(76) Inventor: **Charles Rice**

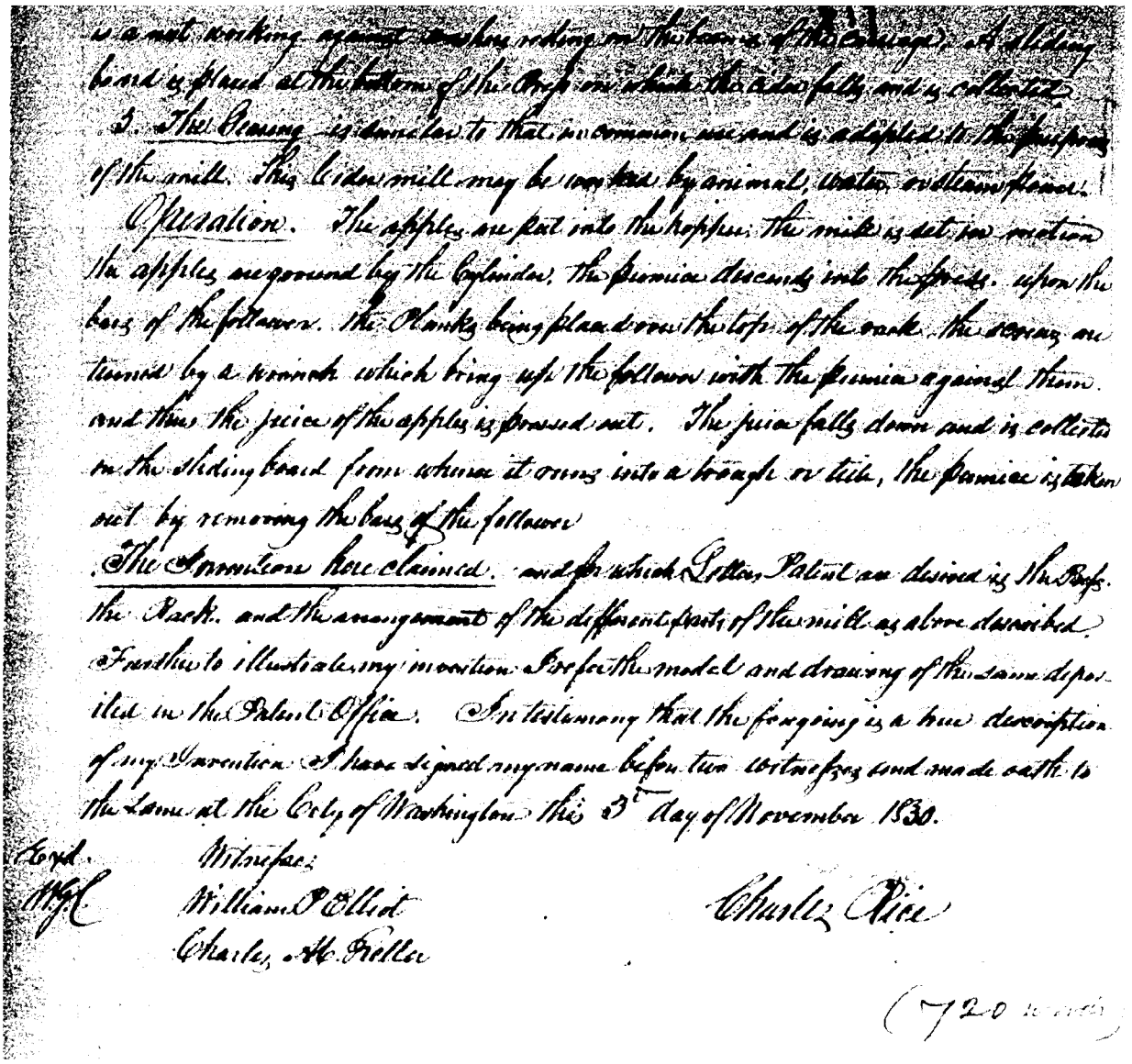
Charles Rice of Barre Worcester Co Massachusetts

Letters Patent.

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said Charles Rice himself of his improvement in Cider Mills.

To all whom it may concern Be it known that I Charles Rice of Barre in the County of Worcester & State of Massachusetts have made an improvement in Cider Mills which is described as follows. This Cider Mill consists of the following principal parts. Viz. 1. The Carriage with the wheels. 2. The racks to receive the pomace. 3 The Cylinder and hopper. 4. The Press and screw. 5. The Gearing - 1 The Carriage with the wheels. The Carriage is about 10 feet long. 5 1/2 feet wide and about 4 feet high framed together and fastened by screws. There are four wheels. the two forward about 3 feet. & the two hinder about 3 1/2 feet diameter. on which the carriage rests and by means of which it is removed from place to place.

2. The Racks to receive the pomace. is made of staves or studs about 4 feet long and about 1 1/8 inch square and the rack may be either circular or rectangular & fixed perpendicularly. If circular the lower ends of the staves or studs are let into an opening on the floor of the carriage — with a hoop and rivets to bind them together at the top. If rectangular then the staves or studs may be fastened into the upper and lower part of the carriage. 3. The Cylinder and Hopper. The Cylinder is about 10 inches long and 8 inches diameter turning on gudgeons resting on two bearings and directly over the Press to be hereafter described. On this Cylinder are 8 or 10 rows of Pins placed in a spiral direction and covering the Cylinder from side to side. In the hopper placed over the Cylinder is an iron bar pinned which crosses nearly end and guides in contact with the points of the cylinder. 4. The Press and screw. The Press is formed by 4 screws about 6 feet long and 1 1/4 inch diameter with a follower attached to their lower ends. This follower is made of two beams with screws passing through them. The floor of the follower consists of loose pieces which can be taken out at pleasure to remove the pomace. On the top of the racks are placed strong iron plates to resist the pressure on the pomace. On the top of each screw



is not working against each other resting on the bars of the hopper. A sliding board is placed at the bottom of the hopper on which the cider falls and is collected.

3. The Gearing is described to that in common use and is adapted to the shaft of the mill. This Cider mill may be worked by animal, water or steam power.

Operation. The apples are put into the hopper. The mill is set in motion the apples are ground by the Cylinder. The pomace descends into the press upon the bars of the follower. The Planks being placed over the top of the crank the screws are turned by a wrench which bring up the follower with the pomace against them and then the juice of the apples is pressed out. The juice falls down and is collected on the sliding board from whence it runs into a trough or tub, the pomace is taken out by removing the bars of the follower

The Inventions Here claimed and for which Letters Patent are desired is the Hopper the Rack and the arrangement of the different parts of the mill as above described. Further to illustrate my invention I refer to the model and drawing of the same deposited in the Patent Office. In testimony that the foregoing is a true description of my Invention I have signed my name before two witnesses and made oath to the same at the City of Washington this 3rd day of November 1830.

Witness:
William P Elliot
Charles M Keller

Charles Rice

(720 words)