

## A. D. 1854.—(CANADA.)—No. 481.

Certain Improvements in Machinery or Apparatus for effecting Agricultural operations.

LETTERS PATENT to Robert Romaine, of Peterborough, in the County of Peterborough, for the invention of "CERTAIN IMPROVEMENTS IN THE APPARATUS FOR EFFECTING AGRICULTURAL OPERATIONS."

Quebec, dated 19th Oct., 1854.

## BRIEF DESCRIPTION.

It consists, in *Firstly*, the general arrangements and construction of machinery apparatus or means for accomplishing agricultural operations; *Secondly*, in the system or mode of digging or disintegrating the soil and of reaping, mowing and performing other agricultural operations, by means of mechanism actuated directly by steam power, but traversed or conveyed over the land by horse or other separate power, the same being applicable for cutting drains; *Thirdly*, in the application and use in digging or pulverising operations of a digging or soil loosening cylinder, which is driven at a high velocity by steam power; *Fourthly*, in the application and use of spring hinged arms for receiving the cut grain or other crop; *Fifthly*, in the application and use of a hollow or tubular driving or first motion shaft, arranged to work loose upon the axle of the supporting running wheels; *Sixthly*, in the system or mode of driving the main running wheels, whereby the machine is rendered self locomotive; *Seventhly*, in the system or mode of digging

## Romaine's Improved Agricultural Apparatus.

or disintegrating the soil, and of reaping, mowing, and performing other agricultural operations by means of mechanism actuated directly by steam power, but assisted or conveyed over the land by horse or other separate power, the same being applicable for the cutting of drains; Eighthly, in the simplified arrangements and the use of the steam cylinder and valve and gearing; Ninthly, in the use of a machine in which the horse or actuating medium goes before the pulverising apparatus in digging, preparing, and sowing, and behind it when reaping and mowing; Tenthly, in the mode of arranging the platform wheels with the large running wheels; Eleventhly, in the mode of supporting the digging cylinder or rotary arms; and, Twelfthly, in the mode of facilitating the turning of the machine at the headlands.

See Drawing No. 481.

ROBERT ROMAINE.