

Besides the amount of azoted fertilizers the bean particularly requires during the 3 or 4 weeks following its germination, that is while awaiting the formation of nodosities on its roots, there must moreover be in the soil, and under assimilable shape, phosphoric acid to hasten the maturity of its fruits and potash to increase the yield and the grade.

Superphosphate of lime (1) or basic slag, applied in the spring at the rate of 400 lbs per acre, will provide the quantity of phosphoric acid most of the soils of this Province, and particularly clay loams, are generally short of.

Sulphate or muriate of potash, spread at the rate of 200 lbs per acre, or



FIG. 4.—“Planet Jr” Double Wheel Hoe No. 11.

failing those, wood ashes, applied in quantities of 500 to 1000 lbs per acre, will exercise, in soils relatively poor in potash and chiefly in *sandy-limy* soils, a most favorable action on the yield and quality of beans comprised amongst “*potash plants*” (2).

The manner in which fertilizers are spread varies with the area of crops and the equipment at our disposal. In field cultivation they may be spread either broad cast or along the furrows. The latter method is by far the most economical as it requires a smaller quantity of plant food. Moreover, those who make use of planters provided with fertilizer spreaders would do nothing better than employ them for this purpose in preference to any other machine. We must not forget, however, that certain fertilizers, such as phosphates and potash salts, must be incorporated to the soil with the spring plowing and not when planting.

(1) *The superphosphate of lime* having a quicker effect (than basic slag) may be spread at the time of plowing preceding the sowing-time; however it could still be given a long time before, at the beginning of the winter for instance (in the fall). The use of the fertilizer too late in the spring may delay its action one year if, after its spreading, dry weather prevails. (Diffloth) “*Sols et Labours.*”

(2) “Let us remember that in the soils rich in potash (loamy soils) lime favors the decomposition and assimilation of this element.” (De V. *ist*).