prove the mechanical condition of both clayey and sandy soils.

The amount of these fertilizing constituents contained in an ash will vary according to the source from which it is derived. The ash from young branches will be richer in potash than that from the older parts of the tree. Different soils will supply varying quantities of potash, phosphoric and lime. The following table gives the composition of a few of the more common ashes that we have analyzed. The ashes were obtained by carefully reducing the several woods to a comparatively white ash. Each sample, therefore, is true to name. The figures given express the percentages of the various constituents contained in the dry ash :

Name of Ash.	Potash.	Phosphoric Acid.	Lime.	Magnesia.	Iron.	Sulphuric Acid.
Hard Maple	9.31	2.03	45.24	.....	.....	1.14
Beech	7.58	1.39	41.21	6.16	.30	Traces.
Cedar	3.30	.98	49.06	2.49	.70	.77
Swamp Elm	35.37	.45	23.64	6.48	.19	Traces.
Black Ash	25.30	1.20	49.04	7.42	.22	.71
Hard Coal	Traces.	.16	Traces.	.....	5.32	.41

The figures show clearly why ash buyers are so anxious to get black ash or swamp elm ashes, but at the same time it must not be forgotten that these ashes are very light and bulky; consequently there may be more potash in one measured bushel of hard maple ash than in the same bulk of swamp elm ash. The hard woods contain a larger quantity of phosphoric acid than the soft woods. Cedar, as would be expected, is poor in both potash and phosphoric acid. The price of potash and phosphoric acid, in the form of artificial fertilizer, during the last year, has been 4 and 4½ cents per pound respectively. Figuring the value of the above ashes on this basis, we have the following as their value per ton :

	Potash.	Phosphoric Acid.	Total.
Hard Maple	$ 7 44	$ 2 71	$10 12
Beech	6 06	1 25	7 35
Cedar	2 64	88	3 51
Swamp Elm	28 29	40	28 69
Black Ash	20 24	1 08	21 32

In many parts of the Province ashes can be bought from the producer at from 3 to 5 cents per bushel, or at a rate of $1.25 to $2.10 per ton. These ashes, in many cases, will contain 10 to 15 per cent. of moisture, but after allowing for this, we see how far the price received is from their real value. By reference to the table of analysis in the College Report, and knowing from what woods the ashes on hand were obtained, one may calculate — at least approximately—their value. But the best way to know their value is by noting the increased yield when they are applied to crops requiring potash.

The caring for and application of ashes must receive special attention. If not properly housed while accumulating, much of the soluble plant food will be lost by leaching. If not applied to