

	Manured.	Unmanured.
Total alkaloids	5.76	4.54
Pure quinine.....	3.11	2.54
Cinchonidine and cinchonine.....	2.65	2.00

Thus showing an increase of 1.22, of which 0.57 was quinine. During the period between 1867 and 1872, trees of *C. officinalis* were treated with about four barrow-loads of farmyard manure each. In February, 1872, bark from trees so manured was analyzed—

	Manured.	Unmanured.
Total alkaloids	7.49	4.68
Pure quinine.....	7.15	2.40
Cinchonidine and cinchonine.....	0.34	2.28

This analysis gives in favor of manuring 2.81 of total alkaloids; but the most remarkable fact is that it has favored the production of quinine over cinchonidine and cinchonine, the total increase of quinine being no less than 4.75. On these results Mr. Broughton remarks that stable or farmyard manure has somewhat of an advantage over the more artificial manures. The effect of these manures is only seen in analysis, as, during growth, no greater luxuriance is noticed in manured trees than in trees not so treated. These results appear to bear out Mr. Broughton's hypothesis, "that the alkaloids in the bark of the trees are not specially active constituents in the processes connected with the life and growth of the plant; and this supposition is supported by the circumstance that the increased amount of alkaloid produced by the manure caused no change in the appearance and rate of growth of the tree."

UNG. HYDRARG. OXIDI RUBRI.—Mr. J. Kalish (*Am. Jour. Pharm.*) recommends the following formula as producing a permanent preparation:—

Ol. Ricini	six drachms.
Cera alba	two drachms.
Hydrarg. oxid. rubrum	one drachm.

The ointment is said to be of good consistency, and a sample six months old exhibited no signs of change. The preparation is, however, liable to objection on account of the disagreeable odor of the castor oil, and also from being more irritating from the presence of this substance. In regard to this the writer says:—"To obviate