In reference to guano I have shown the following facts which should be remembered:

First.—That it is widely different in its composition.

Second.—That this difference exists amongst cargoes coming from the same place, and bearing the same inspection mark.

Third.—That a much greater difference exists between the real value of that called Peruvian and that called Patagonian, than between the prices at which these different varieties are usually sold.

Fourth.—That the value depends almost exclusively upon the quantity of ammonia which already exists in it, together with that capable of being formed by its azotized matter during decomposition, and its phosphate of lime.

Fifth.—That these are worth about as follows: The ammonia about twelve cents per pound, the phosphates about one and a half cents per pound.

Sixth.—That the inspection should show to the purchaser as near as practicable the per centage of these constituents in each cargo.

Seventh.—That the inspection hitherto has failed to do this, and therefore has been useless.

Eighth.—That guano should always be applied to that crop having the greatest money value.

Ninth.—That gypsum, plaster of Paris, should always be thoroughly mixed with it, the best proportions for Peruvian guano being pound for pound, for Patagonian, one pound of gypsum for every five pounds of guano.

PLASTER, GYPSUM, SULPHATE OF LIME.

I have nothing new to offer on this subject either as regards inspection or use, and therefore place before your honorable body what I before said of it.

This substance has been most extravagantly lauded and condemned by different persons, as it chanced to act well or badly, when used by them.

The indication for its use, is its absence or deficiency in a soil.

When all of the other necessary constituents of a soil are present, this being absent, its use in very small quantities, produces an almost magical effect, making all the difference between a soil almost absolutely barren, and one very fertile. Even though it be absent or deficient, by itself it will not do any good, unless *all* of the other necessary constituents of a soil be also present, so that when gypsum does not act well on land, it may be for two reasons; the first, because of its presence already in the soil,—or secondly, because of the *absence* or deficiency of some *other necessary con-*