

After thus briefly reviewing the importance of phosphoric acid space will be devoted to the sources from which the supply of phosphoric acid has been and is being drawn. Attention will be paid principally to the location of the phosphatic deposits suitable for the manufacture of manures, also a word or two about their quality and quantity.

#### BONES.

As already indicated, bones were used at an early date as a supplementary manure, they were also the first source of phosphoric acid for the manufacture of artificial manures. England derived her supply of bones from home collection and foreign importation. Some years importing as many as 100,000 tons of bones from India, Russia, Turkey, Germany, Holland and South America. The home collection is continually on the increase amounting to about 60,000 tons, of which 22,000 were gathered in and around London. The bones now so commonly thrown around our yards would give much better service to the country if gathered and converted into fertilizers.

#### GUANO.

The most important source of the phosphoric acid used in agriculture is undoubtedly guano, of which the best and most abundant supply comes from Peru.

The first shipment of Peruvian guano to England was made in 1840, since then the trade has grown very rapidly.

From the Chinchas Islands (Peru) alone, during the last 28 years, some 10,000,000 tons of excellent guano has been shipped.

Soon after the appearance of Peruvian guano, adventurers hunted the world over for deposits, with the result that deposits have been found all over the world, lying principally from 10 to 20 degrees both north and south of the equator. The principal are as follows:

##### 1. In the Pacific—

Baker, Jarvis, Howland, Starbuck, Flint, Enderbury, Maldon, Lacedpede, Browse, Huon, Chesterfield, Sydney, Phoenix, and Arbrohlos Island deposits.

##### 2. Miji' res deposits on the coast of Bolivia.

##### 3. Patagonian and Falkland Island deposits on the east coast of S. America.

##### 4. Avis, Moana, Tortola, and other Island deposits in the West Indies.

##### 5. Ichaboe Island, Saldanha Bay and other deposits in S. Africa.

##### 6. Kuria Muria Islands in the Arabian Gulf.

Besides the Peruvian, only the Ichaboe, Patagonian and Falkland Guanos are nitrogenous, all guano from the other deposits being of a phosphatic character, the soluble constituents having been decomposed and washed away by wind and weather.

( To be Continued )

#### Weeds.

Have you seen the city-folk riding by,  
With hungry glances at field and sky,  
And exclamations of quick delight  
At the sight of a meadow with daisies  
white?

They do not know  
That a field of daisies should never grow;  
And I envy them so!

Have you ever at eve of a mid-summer's  
day,  
When the air was sweet with scent of hay,  
Felt a sweeter perfume upon you steal?  
And strangely that perfume makes you  
feel

So sad, for you know  
A field of thistles should never grow,—  
I am sorry 'tis so.

Have you heard of the distant desert  
land,  
Where the cactus blooms in arid sand  
So thick it blocks the traveler's way,  
And no green on the lovely plain but they  
Can live and grow?  
So the cactus is only a weed, you know,  
Though we prize it so.

Have you ever noted a field of wheat  
As it waves in the summer breeze and  
heat,  
With here and there in the yellow rows  
A pretty pink blossom as red as a rose?  
It will please you so!  
But the weed ought not in the wheat  
to grow,  
Still they never can weed it out, you know,  
And I'm glad its so.  
But wheat would not be allowed to head  
If it set its roots in an onion bed—  
You'll find it so;  
If a stalk of wheat in the garden grow  
It's a weed, you know.  
From the daisied hay