Sub-Varieties of the Spanish.

BLACK MINORCAS.—This variety of the white-faced Black Spanish is very common in Devonshire and Cornwall, England, and but little known in Canada and the United States. It is thought by many breeders that this variety is probably the progenitor of the white-faced Spanish, differing as it does chiefly in the face being red, the ear-lobe being white, as in the Spanish. In the Minorca, however, there is the same full development of comb and wattle, especially in the hens, some of which are inconveniently large; they are also lower on the legs and of squarer build than the true Spanish. It is believed that Black Minorcas were first imported from the Island of Minorca, in the Mediterranean, where they have been seen running about very generally. In size they are somewhat smaller than the Spanish, but very hardy and good layers, laying nearly ten months in the year. Pullets hatched the latter part of March will generally commence laying the latter part of September, and continue during the winter and on to the next moulting season, but they must have warm, comfortable quarters during the winter season, and be well and regularly fed. They, like the white-faced black, are of the non-sitting class, lay large white eggs and a good number of them, even as many as two hundred in the year; and as table fowls, being more rounded in form and shorter legged gives them advantages worthier aristocratic relations. The comb of the cock is very large, straight, and upright, the spikes being very wide at the base and tapering to the points. The wattles are very large and pendulous, the ear-lobe long, and as purely white and soft as a Spanish; but the face is red, with a purple tinge underneath the eye, the cheeks being very thin. The eye should be a very dark color, and the beak dark horn. The shoulders are wide, and, as already said, the legs short and carriage rather low, the tail very large and flowing. The comb of the hen falls over one side of the face, so as almost to conceal the whole of it, and even the bill; otherwise she corresponds closely with the cock, allowing for the difference of sex. The plumage both of cock and hen much resembles that of a rook, being a sooty kind of black. The weight of the cock averages about five and a half pounds, and of hens four and a half pounds. Black Minorcas are very useful birds; and being abundant egg-producers of large-sized eggs, could in all probability, by selecting eggs from only the best layers, produce a breed which would average considerably more than the number already mentioned.

WHITE SPANISH AND MINORCAS.—There are white varieties of both these breeds, resulting no doubt from the action of some peculiar constitutional cause, or, as some call it, the result of an occasional "sport." From such occasional sports, however, a white variety has been permanently established. In England they have freqently been exhibited at poultry shows, although no separate class is established for them. The directors of our Provincial Show set apart a separate class for them here, but it is now usually filled by entries of White Leghorns. The White Spanish is not by any means a nice-looking fowl, the plumage affording no contrast to the white face, but on the contrary giving it a sickly or ghastly cast, which is only less conspicuous when high health makes the color of the combs and wattles as bright as possible. It is different with White Minorcas; they are a much handsomer fowl, the red face presenting the contrast which the plumage seems to require. It is said by some breeders that they are larger birds than the Black Minorcas, taller, closer-feathered, and fuller on the breast, the cocks averaging seven pounds and the hens five and a half to six pounds; that they are more delicate but not such good layers, especially in the winter. The plumage should be a pure spotless white all over, beak and legs being also white. White Minorcas are by no means destitute of attractions, but are not good layers. They are, however, inferior to the White Leghorn.

ANCONAS.—Another variety of the Spanish, and presenting all its characteristics, general shape, large comb, upright in the cock and falling over in the hen, large wattles and ear-lobed. The face is red and somewhat resembles the Minorca rather than the Spanish type. The plumage is "cuckoo," a Dominique in color, and is the same in markings and colors as described in the Dominiques. There is scarcely any doubt that the origin of Anconas is to be found in accidental sports of this color crossing Black and White Minorcas. Mr. Wright says that "black and white being readily interchanged, and White Minorcas being rather scarce, the latter have, to our knowledge, been often crossed with black, most of the produce being black and white. The result of crossing any very dark fowl with white is, however, productive of a certain number of this 'cuckoo' marking. Anconas are always scarce, but we generally see a few every two or three years, and they could be easily perpetuated if desired. They are generally good for a prize in the 'any variety' class, and look decidedly attractive in a pen if of at all good points and quality. In the only case where we were able to make personal inquiry the owner, an innkeeper, whose hostelry rejoiced in a name which must surely have conveyed the idea of Paradise to these lucky birds, being no other than the '*Wheatsheaf*'—informed us they were hardy, and 'no end at laying.' Of course; how could they help it in such circumstances? These qualities, taken in conjunction with their scarcity, would be almost conclusive in favor of their origin in some cross, and a further corroborative argument may be found in the fact that all the specimens we can remember to have seen have had shorter legs than any other variety or sub-variety of Spanish."

That all the varieties of the Spanish have one common origin is evident in the principal characteristics of general shape, large combs, absence of the incubatory instinct, and the abundant laying of large white eggs. The differences in the sub-varieties are obviously the result of crosses, as in other varieties of fowls. One of the best varieties is undoubtedly the Black Minorca, and, both as regards usefulness and exceeding beauty when well bred, is well worthy the attention of breeders; but as for laying qualities, all the varieties stand high, and will always rank among the most useful races of fowls. Says the authority already quoted: "Most of the crosses make capital layers, the best in our opinion being that between the Spanish cock and the Brahma hen. Both this cross and that with the Cochin make capital sitters. The cross with the Houdan produces a nondescript bird, which often lays enormously, but usually sits at least once a year. In fact, as already remarked, laying qualities distinguish nearly all the cross-breeds. Another variety—the Columbian fowl—is the most promising of all the Spanish crosses, and might be made into a new and attractive variety with comparatively little trouble, this cross appearing to 'hit' well."

REMEDY FOR PIP.—Castor oil is called an excellent remedy. Give it every alternate day for a week.

THE COCHIN NOT DEGENERATED.—A veteran poultry breeder writes the *London Field* that, in his opinion "we do not possess any breed in a more primitive and less degenerated state than the Cochin; that the Cochin is one of the least, if not the least domesticated fowls we possess."

FOOD FOR YOUNG GOSLINGS.—The *Cottage Gardener* says that nothing is so good for goslings as grass; that is probably why so many are kept where there are commons. Oatmeal put in a pan of water is excellent food for them, and it is often wise to add some bran to it. Chickens should have bread and milk, chopped egg, cooked meat cut up fine, crumbs, sods of growing grass, fresh earth, and in bad weather, beer.

The Apiary.

Theories and their Advocacy.

It is during the working season that most of the theories of bee life are evolved from the apicultural mind. While the bees are busy building cells, the bee-keepers are busy building theories. There are minds that have a natural faculty for the construction of theories, even as bees have a natural faculty for cell-construction. Theories ought always to be the results of observation, and should be based on facts. But they are often like those pleasant stories we sometimes meet with, and which are headed, "founded on fact." This is generally fair notice that among what is strictly true there will be interwoven a good deal that is purely imaginative. Imagination is very well in its place, but it must be excluded from the realm of science. It is pleasing and useful in light literature, but considerably a nuisance mixed in with the solid and sometimes prosaic affairs of real life. Not a few of the most important of human interests have suffered from the tendency of mankind to spin theories out of cobwebs, and to go to the realm of investigation with their theories ready made. Most of the difficulties in theology have arisen out of preconceived theories, which their authors have sought to uphold, when framed, out of the Book. Bee-keeping has suffered in the same way. People have gone to the hive to get evidence in support of a favorite theory, instead of going to it without any theory, to gather facts as the material out of which to manufacture theory. A certain member of the British Parliament was frank enough to confess that he trusted to his memory for wit, and to his imagination for facts. Not a few draw on the imagination for facts, who have not self-knowledge enough to be aware of it, nor candor enough to own up about it. Theories require the utmost deliberation and care in construction and, like Italian queens, are not worth much until well tested.

When a theory is adopted on what are considered sufficient grounds, it should be advocated with modesty and forbearance. Haste in forming a theory is usually followed by dogmatism in contending for it. A man who is patient in constructing a theory, will be patient in urging it upon the acceptance of others. Slow in espousing it himself, he will not be surprised to find many who are slow as himself, if not slower. Impatience to get credit and honor from those to whom a theory is announced, not unfrequently betrays theorists into unseemly behavior. Some espouse theories as they do matrimonal partners, and afterwards illustrate the proverb about marrying in haste and repenting at leisure.

Theories, if well-founded, will bear the test of criticism, and the sensitiveness of many to a dissenting word argues no great amount of confidence in their own views. What is based on fact can never be overthrown. It is like the "tall cliff" immortalized by a great poet:—

> "Though round its base the rolling clouds are spread,
> Eternal sunshine settles on its head."

We commend these general and, as we think, timely remarks on "theories and their advocacy," to all and sundry who are engaged in bee-culture.

NATURAL SELECTION.—Darwin thus accounts for the proboscis of the bee. Special organs, such as the bills of birds, the long legs of water fowls, wings, the long, rough tongue of birds that hunt worms in rotten wood—all these things were gradually acquired by the constant exertions of the animal to supply its wants. "Thus," he says, "a proboscis of admirable structure has been acquired by the bee, the moth, and the humming-bird, for the purpose of plundering the nectaries of flowers." Will he tell us how the bee got along while the proboscis was being acquired "gradually?"