Some Mistakes of Darwin.

Written for the American Bee Journal By Rev. L. J. Templin.

While I have never been able to follow Mr. Darwin in many of his speculations in regard to evolution, still I have admired him for his pains-taking researches and the vast array of facts in natural history that he has placed on record. But I find that with all his profound knowledge of nature he occasionally makes a slip that inclines one to think

Mr. Darwin took some of his alleged facts at second-hand, and impresses one with the thought that he is not a guide that is to be followed implicitly.

While reading "The Origin of Species,"

I met with the following statement:

"All vertebrate animals, all insects, and some other large groups of animals, pair for each birth." Chap. IV., subhead, "On the Inter-crossing of Individuals."

As I understand it, every egg that is laid and hatched is a birth. If this is correct, it is evident that Mr. Darwin is "away off" from the truth; for every intelligent person knows that bees, wasps, and some other insects do not pair for each birth. And in the case of parthenogenesis, which Mr. Darwin calls "a curious exception not well understood," there is certainly no pairing at all though there are innumerable births. Then in some fowls-the turkey, for instance-breeders say one copulation suffices for a whole clutch of eggs.

Again, in Chap. VIII., and under subhead, "Cell-making Instinct of the Hive-Bee," we have the following:

"The work of construction seems to be a sort of balance struck between many bees, all instinctively standing at the same relative distance from each other, all trying to sweep equal spheres, and then building up, or leaving ungnawed, the planes of intersection between these spheres."

Now every one who ever saw bees building comb, knows that the above is a purely fanciful sketch drawn from the

imagination of the great naturalist.

All of which goes to prove that it is better to use ones brains and eyes than to be blindly led by a great name.

Canon City, Colo.

The So-Called Mistakes of Darwin.

Written for the American Bee Journal BY CHAS. DADANT.

Although I am very little competent in the matter, I desire to redress the ideas of Mr. Templin on the teachings of Darwin, as given on page 215.

Mr. Templin quotes Darwin, who

wrote:

"All vertebrate animals, all insects, and some other large animals, pair for each birth." Then he adds: "As I understand it, every egg that is laid and hatched is a birth. If this is correct, it is evident that Mr. Darwin is away from the truth, for every intelligent person knows that bees, wasps, and some other insects do not pair for each birth."

So it is on the meaning of the word birth that the criticisms of Mr. Templin rely. If we open the Webster dictionary

at the word birth, we find:

"4. Birth is the act of bringing forth; as, 'she had two children at a

birth.' - (Milton.)"

"8. That which is produced, whether animal or vegetable: 'Other hatch their eggs and send the birth till it is able to shift for itself.'—(Addison.)"

So it is certain that Darwin was not so void of common-sense as to suppose that every one of the 2,000 eggs laid by a queen-bee every day for months, had to be impregnated by as many copulations.

Darwin was not a bee-keeper; therefore it is not astonishing that he did know neither the parthenogenesis nor the ways used by bees to build combs. But in writing on these matters, he is far from being positive, for he says about the building of combs, "That the work of construction seems to be a sort of balance struck between many bees, all standing instinctively at the same

relative distance from each other," etc.; and on the parthenogenesis he writes that "it is a curious exception not well understood."

When Darwin wrote his book on the "Origin of Species," in 1859, the theory of Dzierzon, on the parthenogenesis of bees, was yet in its infancy, and was not accepted by all the bee-keepers; so it is but natural that Darwin did not understand it; for the most learned men cannot be acquainted with every kind of knowledge. So the criticisms of Mr. Templin, if investigated, are reduced to nothing, and cannot prove, as he suggests it, that it is better to use one's brains and eyes than to be blindly led by a great name. Such a suggestion, if practically applied to science, would lead us to a complete negation of most of the greatest discoveries.

The ideas put forth by Darwin on evolution, are now admitted as true by all the savants of Europe and America. They are so rational, so much sustained by recent discoveries, that they cannot

be any more contested.

I was about 18 years old when, nearly 60 years ago, I saw, in a humorous paper of Paris, Le Charivari, an engraved criticism of the book of Lamark, who was one of the first discoverers of evolution. That journal showed an oyster which, by several progressive changes, had become a frog, and that frog, by other successive evolutions, was changed into man. As I had already noticed the relationship of the fishes with the mammiferous animals, by thinking of the whales, which nurse their cubs as do cows, and which have lungs instead of gills; as I had noticed also that frogs breathe water when young, and air when more aged, I was prepared to admit the theory of Lamark; so I procured his book, studied it, and became more and more convinced of the rationality of his ideas.

This theory, after a sleeping of 40 years, a result of the incapacity of Lamark to continue his researches (for he was struck with blindness, caused by small-pox, during the last 17 years of his life)—this sleeping being the consequence also of the opposition of Cuvier, who was then at the head of progress on natural history, and who contended that the animals were created by spontaneous generation—meaning that, in a country where no horse existed, a horse and his female could be spontaneously created to fill the need; and that, in another country, where insects were missing to help the fertilization of flowers, a queenbee, with her drones and workers, would be created to dwell in a hollow tree, etc.; after such a delay, and in spite of the works of some other partisans of the doctrine of evolution, the truth of the ideas of Lamark was confirmed by the studies of Darwin, and by thousands on thousands of discoveries, which have placed this theory among the scientific facts, which cannot be any more questioned than the revolving of the earth; for the publication of which, less than 300 years ago, Galileo was put in jail for the rest of his life, after having been compelled to retract under the threat of torture. Fortunately, those times are far from us, for Darwin, instead of being prosecuted, had the honor of being buried in the Westminister Abbey, where are the tombs of the kings and of the most illustrious men of England.

Hamilton, Ills.



The Vermont State Convention.

Written for the American Bee Journal BY H. W. SCOTT.

The 19th annual convention of the Vermont Bee-Keepers' Association was held in Burlington, Vt., on Jan. 24, 1894; Pres. W. G. Larrabee in the chair.

After prayer by H. L. Leonard, T. H. Wheatley was elected Secretary pro tem. The forenoon was devoted to the appointment of committees and the receiving of new members and the annual dues.

The afternoon session opened with a large attendance. The minutes of the last annual meeting were read and approved. The roll call showed 25 members present. The report of the Secretary showed an enrollment of six new members since the last meeting; and that of the Treasurer, a small balance in his hands.

The address of the President followed. He congratulated the Vermont bee-keepers on their successes during the past season; and in his report of the North