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THE CANADIAN SPORTSMAN AND NATURALIST.

No. 10.

MONTREAL, OCTOBER 15th, 1881.

VOL. I.

WILLIAM COUPER, EDITOR.
W. W. DUNLOP, ASSISTANT EDITOR.
ERNEST D. WINTLE, TREASURER.

DESTROYING DEER.

We have received the Fourth Book of the Michigan Sportsmen's Association, being the transactions in full of the Sixth Annual Session held at Lansing last January. It embraces several questions of vital importance to the Association, especially regarding the Fish and Game of the State. The Sportsmen of Michigan deserve the sympathy and support of all who love to use the rod and gun, and we trust that the State Legislature will embrace and carry out the Laws which the sportsmen of Michigan are anxious to enforce. The late enormous slaughter of deer within the range of the Sporting regions of the Association is sufficient to cause enquiry, and if such illegal killing is not prevented, the ultimate result will be the total extinction of *Cervus Virginianus* in the State of Michigan. We give the following extract from Prof. H. B. Roney's elaborate paper on the destruction of deer in 1880.

TOTAL EXTINCTION INEVITABLE.

"These statistics give a grand total of 70,000 deer, or about 10,000,000 pounds of venison destroyed in Michigan in the one year of 1880. At this rate how long will it take to exterminate the species in Michigan? How long can the State stand this drain, before the last relic of the noble race disappears? Just about five years, and they will become scarce in less than twelve months, as indeed they are already. And when the present supply is gone, where can the next come from? Certainly not from the North, East, or West, for that is a geographical impossibility, while from the South it can not be expected. Unlike other States which border upon vast wildernesses out of which a new supply comes to replenish the disappearing race, the Lower Peninsula of Michigan, when it has once permitted this noble animal to be exterminated between lakes Michigan and Huron, has for

ever lost a great source of wealth and valuable food supply, which if now wisely preserved will last for generations."

The Sporting Clubs of Canada will have to keep a sharp lookout in order to prevent a similar slaughter along the woodlands of our Northern lakes, because we are fully aware that when market hunters are not allowed to enter the woods of Michigan, they will doubtless have to procure the animals from other localities, and they will enter Canada for their game. We have had an instance of this from market fishers who had a contract to supply American hotels with a weekly weight of Brook Trout, the fish being then supplied from the Adirondacks. The ponds or lakes of the latter locality were quickly exhausted and could not supply the demand, but in order to do so, the contractors came to fish the trout regions in the Province of Quebec. One thousand pounds was the weekly weight sent out, and this was carried on profitably for nearly three years before the Fishery Department stopped it. The taking of this quantity of trout at that time from the Laurentian lakes, did not, in our opinion, make a great difference in the way of decreasing the annual production, as the natural facilities for the propagation of trout in our Northern lakes and rivers, are not surpassed in any other portion of the world. The spawning-grounds adjoining our northern mountain lakes are cool and numerous, and will therefore be always productive.

It is different with deer, which are only found within their food ranges and are accessible during the open season. We cannot allow American market hunters to enter these deer frequenting localities to slaughter them as they have been in the wilds of Michigan. This privilege is only for the humane sportsman who goes out to enjoy a few days, not with the purpose of making money from his skill in handling the rifle—not with the intent of destroying

more than can be useful to himself and friends—not with the selfish thought of sending the carcasses of the deer to market. To such a sportsman this kind of recreation partakes of the thrill well described by the ancient hunter. But to the market hunter, no such thrill enters his breast, his motive consists in quality, quantity and weight, knowing well that he can easily obtain a market for his ill-gotten flesh. The species of deer inhabiting our northern forests have increased since the British troops have been removed from Canada. The enormous quantity of moccasins and snow-shoes made for soldiers was, in a great measure, the cause of the scarcity of Moose and Caribou. The Indians who made the articles had to obtain the material, and the Canadian woods and mountains were hunted in and out of season to supply the demand.

It is reported that the late bush fires destroyed a number of deer, and it is furthermore said that many were shot while retreating from the heat and approaching clearings. Thus between woodland fires and the power of man, little chance had they for existence. Those who destroyed the innocents under these circumstances and at such a season, deserve to be stripped and scourged. We trust that at no distant day, a law will be made and become powerful enough to reach cases of this kind, and the unmanly conduct severely punished.—C.

CANADIAN MUSEUMS.

THE NATURAL HISTORY SOCIETY OF MONTREAL.

The collections of the above Society are generally speaking, well represented in regard to American forms. There is also a large quantity of foreign material, making altogether a very good museum, and we are pleased to say it is in a fair state of preservation at present. The collections, as a whole, are probably the oldest in the Dominion. For a number of years they were under the superintendence of a paid Curator, at that time known as a "Scientific Curator," who did very

little in regard to the arrangement of the American birds. In accordance with the advanced knowledge of nomenclature, the new system of classification should be one of the first duties that a Scientific Society had to perform. The last time we visited this institution, it was remarkable that some conspicuous foreign birds had no names attached to them; yet the Society had been paying a man during a series of years to perform this work. The Society is sustained by private subscription which has been lately reduced to Three dollars per annum for membership. The local government gives it annual aid to publish its transactions. We have no knowledge of its financial position at present, yet, we may say that this Society shows evidence of being somewhat exclusive. If its Council would like to see a good balance sheet, all they have to do is to place its library on the same foundation as the Mechanics Institute; open the Museum to the children from the various schools, say at a few cents per head. By so doing the building will always be full of inquisitive youths, who are in search of knowledge, especially regarding objects of Natural History. We would like to see the unhandled worm-eaten books on Natural History that are locked up on the shelves of some institutions made use of in the same way as in lending or church libraries. Are not books written and made to be useful? They cannot do any good while locked up against those who can pay for the privilege of reading them. The Natural History Society of Montreal has a grand opportunity of establishing a circulating library, which of itself would be a source of strengthening its membership, and we presume if this is done, its doors will not remain so long closed to the general public, as they have hitherto been. In conclusion, this institution must, ere long do something in the way of claiming the attention of the public; it will have to abandon its present exclusive position, and give a chance to those who are anxious to give it reasonable support. Unless this is done a

rival Museum may offer easier facilities for instruction, and then the long-continued want of push and management will prove unfavourable to its prosperity.—C.

THE MIGRATORY QUAIL.

This bird which has been introduced into Canada and the United States during the past few years is the "*Coturnix Communis*" of Europe, a species much smaller than our "*Virginianus*" or Bob White. Unlike the latter it is capable of long and sustained flight, migrating annually from its winter home in Africa, crossing the Mediterranean Sea in its course and dispersing to its breeding places throughout Europe, from whence it again returns on the approach of winter. This bird resembles our Western Quail "*Ortyx Virginianus*" very much but it is about one third smaller and the throat of the male is marked with dark brown or black from the bill downwards.

The nest is simply a depression in the ground lined with a little grass, and is usually situated in a meadow or field. The eggs 12 to 15 in number are of a pale greenish colour, blotched profusely with brown and are about the size of those of the American Robin. The female while incubating sits very close on the nest, the clatter of a mowing machine being sometimes not sufficient to cause her to leave and numerous cases have been recorded where the bird was decapitated by one of these machines rather than leave the nest.

The young birds leave the nest as soon as hatched and mature very rapidly, affording good shooting by September.

As the climate in some of the northern portions of the Dominion is too severe in winter for "*Virginianus*" it has been hoped that the introduction of the Migratory species would be the means of providing our sportsmen with Quail Shooting, as it seems only reasonable that these birds will migrate here as well as in Europe. During the past two years numerous birds have been liberated at St. Stephen,

N.B., Quebec City, Lachine, and other localities. Some young birds were captured at St. John during the same season those had been liberated at St. Stephen and were evidently the young of the latter as none had been liberated nearer. Several nests were also found this season at Lachine where the birds had been introduced in the spring, so there is no doubt of their breeding readily; the most important point is in regard to their returning the following season as in Europe. We believe the experiment has not yet been sufficiently tested in Canada to determine this, although it is reported some of these birds have been seen in the vicinity of Quebec, where they had been liberated the preceding season. The fact of their returning once ascertained without doubt, we have many localities affording suitable covers which would in a few years become valuable shooting grounds. Special legislation for their protection would however be required until they became sufficiently numerous, and generally distributed. Let us hope the introduction will be a success and that in a few years we will be able to number these pretty Quail with our game birds.—WALLACE.

CANADIAN LOBSTER FISHERIES.

In the September number of this Magazine, we spoke of the thousands of Lobsters taken annually from the St. Lawrence Gulf waters of Canada for canning. When the article was written, we had no idea that lobsters were fished out along the Bay Chaleur. We anticipated the first decrease from Prince Edward Island where we are informed the catch is very large during the season. Lobster packers will have to be careful not to overdo this crustacean fishery, as the animals are differently constructed from fish, and have not the power or facility of wandering like the latter. It just comes to this, that the places where bobsters were formerly abundant cannot be so now, and will not pay because the packers, in many instances made no determined restrictions in regard to the capture of the

females, the *ova* of which were destroyed by thousands. If this system is to go on for a few years longer, the lobster canning business will be at a stand still for half a century at least, and the crustacean will become a luxury. It takes a long time to produce an adult lobster; it has to go through peculiar phases of existence before it becomes in condition to be food for mankind. These facts should not be overlooked but remembered by the men now in the business; its continuity rests with them. In the article above referred to, we mentioned that the Island of Anticosti was a good locality for lobsters, then stating that there is a lack of keen venture among the Canadian people in allowing this fishery to go to waste. We are astonished that the Americans did not place a cannery on Anticosti years ago. But now, that the crustacean has been exhausted in several places on the south coast of the Gulf, one New Brunswick firm is preparing to establish a cannery on an extensive scale on that island. So much good has therefore arisen from the influence and utility of our remarks, and it will be the aim of the CANADIAN SPORTSMAN AND NATURALIST to continue to place before the public, other matters of equal interest.—C.

OUR GAME.

In former numbers of this magazine, we reprinted reports of the Michigan Sportsmen's Association on the Nomenclature of a portion of our game. Additional matter on this subject was read by President Holmes at the last meeting, and we have taken the liberty to compile it to suit our Canadian Sportsmen, giving full credit to the venerable Dr. and the Committee for their report on popular and scientific nomenclature. In order to show that there is a similarity of species occurring in the Provinces of Ontario and Quebec, with those recorded from Michigan, we append certain marks to indicate their geographical range.

REPORT OF THE MICHIGAN SPORTSMEN'S COMMITTEE ON NOMENCLATURE.

The careful analyses of classification with reference to certain genera submitted at the

session of 1880, will, we think, sufficiently indicate the methods adopted by this committee in arriving at conclusions, "both popular and scientific." It will therefore be unnecessary to occupy your time in the enunciation of our analyses of the genera herein considered, and we will proceed at once to our task, and continue the work of making a correctly named list of game animals, by naming a portion of our water-fowl. We do not intend to make a complete list of any order or family, but to confine ourselves to such species as occur either habitually or accidentally in our State.

As belonging to the latter class we may mention the swans. There are but two species that can be considered as belonging to our fauna, even accidentally. These are the whistling swan, *Cygnus Americanus*,* also called the American swan, and the Trumpeter swan, *Cygnus buccinator*.

Of the goose family there are but two genera containing species likely to be found within the borders of our commonwealth.

The goose genus, proper; all having bright or light-colored feet and bills, and white or much varied plumage, namely: White Fronted Goose, *Anser albifrons*;* also called prairie brant, and speckled belly. This is probably identical with the white-fronted goose of Europe.

Snow goose, *Anser hyperboreus*; † also called white brant.

Lesser Snow Goose, *Anser hyperboreus*; † variety *albatu*s. Like the snow goose, only smaller.

Blue Goose, *Anser caerulesens*; also called bald brant.

The brant genus, proper; all having black feet and bills, and the head and neck black with white spaces, the general color of the body being gray, namely: The

Canada Brant, *Branta Canadensis*; † also called Canada goose, gray goose, and common wild goose. This is the only goose, or properly speaking—brant, that is common to Michigan. There is a variety, *Leucopareida*, which is not known to have occurred in this State, while the Hutchins Brant, *Branta Canadensis*,* var. *Hutchinsii*, is quite generally distributed, and is smaller than the Canada brant.

The Brant, *Branta bernicla*, † also called brant goose, barnacle goose. There is a well defined variety of this brant, viz:

The Black Brant, *Branta bernicla*, † var. *nigricans*; on which the black is more extensive.

Of our ducks there are three sub-families, viz., the *Anatide*, the river of fresh-water ducks; the *Fuligulionae*, the sea, or deep water, ducks, and the *Merginae*, the fish ducks.

Of our shoal-water or river ducks we will enumerate as belonging to our avi-fauna:

The Mallard, *Anas boschas*. † The male is also called the green-head, and the female the gray duck.

The Black Duck, *Anas obscurus*, † also called dusky duck, and black mallard.

The Pintail Duck, *Anas acuta*, † also called the sprigtail.

The Galdwell, *Anas streperus*,* also called gray duck.

The Widgeon, *Anas Americana*, † also called the American widgeon, and bald-pate.

The Shoveller, *Anas clypeata*,* also called broad-bill and spoon-bill.

The Wood-duck, *Anas sponsa*, † also called Summer duck and tree duck.

Of the teal genus we have here:

The Green-winged Teal, *Querquedula Canadensis*. †

The Blue-winged Teal, *Querquedula discors*. †

Of the deep-water or diving ducks found more or less habitually on our waters during their migrations, we notice:

The Canvas-back Duck, *Fuligula vallisneria*. †

The Red-head Duck, *Fuligula ferina*, var. *Americana*, † also called pochard, red-headed wigeon, and rufus-necked duck.

The Blue-bill Duck; *Fuligula marila*, † also called big black head, greater scaup duck, raft duck, flocking fowl, and shuffler.

The Little-blue bill, *Fuligula affinis*; † with the same local names as are applied to the next preceding species, with the word little prefixed.

The Ring-necked Duck, *Fuligula colaris*; * sometimes improperly called blue-bill.

The Golden eye Duck, *Fuligula clangula*, † also called garrot.

The Iceland Golden eyed Duck, *Clangula Islandica*, † breeds in trees like the wood-duck. (Nest found in the Province of Quebec.)

The Buffle-headed Duck, *Fuligula albeola* † also called butter-ball, spirit duck, and dipper.

The Lake Huron Scoter, *Fuligula bimaculata*,* also called American black scoter and coppernose.

Of the fish ducks we have three species viz:

The Goosander, *Mergus merganser*, † also called saw-bill.

The Red-breasted Merganser, *Mergus serrator*, † also called fish duck and sheldrake.

The Hooded Merganser, *Mergus cucullatus*, † also called saw-billed diver.

The list embraces a portion of the aquatic birds frequenting Michigan marshes and waters. If we would all cultivate the habit of observing and carefully noting novelties, anomalies and and unusual occurrences, it would add immensely to the pleasure of our recreation trips, and would give us something to think besides slaughter and a "big bag."

Your committee ask the further attention of the association for a few minutes while we review a portion of the report on nomenclature made last year, which was accepted, and the recommendations adopted, excepting that part pertaining to *Ortyx Virginianus*,* called quail at the North, and partridge at the South. We do not propose to go into a minute description of the three birds involved in this question, as they are too well known to intelligent sportsmen to require it. But we wish to submit a few generalizations. The name quail has been applied to the *Coturnix communis* (the true quail) for ages. No one disputes its correctness. It belongs to the European bird, that has been quite largely introduced into this country within the last few years. It is equally true and undisputed that the quail, *Coturnix communis*, sometimes called "migratory" quail, is distinct from our American bird, *Ortyx Virginianus*, not only specifically but generically distinct. In habits these two birds differ as essentially as the barnyard fowl from the Guinea hen. It is manifestly improper to call two entirely different birds by the same name, and as the name quail properly and indisputably belongs to *Coturnix communis*, it certainly does not belong to *Ortyx Virginianus*.

Again the name partridge as indisputably belongs to *Perdix cinerea*. (The true partridge.) No one disputes it. Now, although our *Ortyx* is nearer to *Perdix* than it was to *Coturnix*, yet it is likewise essentially different from the former. Ornithologists acknowledge it to be generically different. And as *Perdix* was christened partridge in vernacular long before *Ortyx* was known to civilized man, he is certainly entitled to the name. As before stated, it is manifestly improper to call two distinct birds by the same name. Therefore our *Ortyx* should not be called partridge.

In the light of this simple logic we see why the controversy that has been so warmly carried on for years as to whether our bird should be called a quail or a partridge, has

been so entirely unsatisfactory. The simple fact is, he should not be called either—because he is not either. The controversy has had just as much point as would a discussion of the question as to whether man should be called an ape or a baboon. He should not be called either, because he is neither.

Then what shall we call our *Ortyx*? The term Bob White has been proposed for him, and is occasionally used, but it is not euphonious, and does not seem to meet with favor. Although it is not inappropriate as applied to him, it will not suit his cousins. It would be manifestly improper to say California Bob White, the Mountain Bob White, etc. Their voices would belie the name. But the name recommended by your committee last year is not liable to any of these objections. It is euphonious, it is short, easily written and easily spoken, is appropriate to all our American birds, of what has been called the quail genus. It sounds well, and is appropriate to say the Virginia colin, the California colin, the Mountain colin, the Massena colin, etc. Then again the name *Colin* has the right of priority. It was used in probably the earliest description of our bird. It is given in both Webster's and Worcester's unabridged dictionaries as the name of our bird. Also in Chamber's Encyclopedia, and in Henry Thornton Wharton's List of British Birds, which is authoritative, we find *Ortyx Virginianus*—Virginia colin; "also in Col. Montague's Ornithological Dictionary. It seems quite important that undisputed names should be adopted for all our game, so that when they are named in our laws there will be no ambiguity about the meaning of those laws. We therefore respectfully recommend the adoption of *Colin* as the vernacular or common name of *Ortyx Virginianus*.

Marked * Ontario † Quebec ‡ Quebec and Ontario.

Correspondence.

ROBINS AGAIN.

To the Editor of THE CANADIAN SPORTSMAN AND NATURALIST:—

MR. EDITOR.—In your last issue, I was surprised at the comments of the Rev. Mr. Clementi, and am sorry to see such ignorance exhibited by him, and "Hammerless Greener." The best answer to give these gentlemen, is that I allow their letters to be their own condemnation. You justly observe that there is no specific connection between the English

Robin red-breast and the American Fieldfare, or Migratory Thrush, which last had been erroneously nick-named "robin," by the Pilgrim Fathers more for a joke than a reality. The English red-breast is not much larger than a Titmouse (*Parus atricapillus*) the former having longer legs, and it is of an olive green on the back, with a brick red breast, and its eye is black, with a beautiful soft and gentle expression, that has a charm in itself. There is no "blood color" about it. The American Fieldfare arrives in Canada as the snow melts, and at this date, 1st Oct., they are migrating south. I have read many traditions, concocted by pious frauds, but until otherwise satisfactorily demonstrated, I shall consider the miracle of "picking thorns" emanating from the brain of Mr. Clementi. The American Fieldfare is not "God's bird," and has nothing to do with it. It would indeed be the height of cruelty, or more properly inhumanity, deliberately to shoot an English robin, which, in gentle confidence, hops around the door steps alike of rich and poor. When a boy, in Europe, my father and uncle always took me and my brother in Christmas week, to shoot Blackbirds, Fieldfare, Larks and such small game, to make a large pie for New Year's day. Now, as a recollection of past days, let me say, that this pie was baked in a huge round dish, twenty inches across the bottom and eight or nine deep. At the bottom was placed a hare or pair of rabbits, then, four pheasants, and four partridges and the rest of the space filled in with small birds. With boyish pride, we recounted how many splendid shots we had made at sitting birds; that such a Blackbird was killed at 50 or 60 yards, and so on. But Fieldfares and Larks were our staple game. Then, all the young folks of the neighbouring gentry were invited for the New Year's pie, and I assure you, it was discussed as little ladies and gentlemen, of from eight to fourteen could, and we did it justly. I will never forget that on one occasion I fired at a flock of sparrows and other small birds, in the barn yard, and killed about a dozen. My uncle helped me to pick up the wounded, and found a red-breast I had unfortunately killed with the rest. He would accept no excuse for such a crime. No pleading, I did not see it, or I would not have fired. The poor robin was killed. That was enough. I got my ears well cuffed, and was sent to the library for the rest of the day, for my careless conduct, and he ordered me to learn the first ten lines of Sallust by rote, beginning with "*Omnes Animalia*," and I had

to do it. Notwithstanding the sentimentalism of the Rev. Mr. Clementi, Mr. Saunders, President of the Entomological Society of Ontario, stated in his last annual address to that learned body, that robins were one of the most mischievous of our birds, and I assure you the piety and extreme humanity of such correspondents will not weigh with me about relishing Fieldfares. In all the leading hotels in all the large cities of the United States, "robins" are to be found on the bill of fare. Do they know that 25,000 dozens of birds, mostly Red-wing Blackbirds, Rusty Grackles and Bobolinks, were sold last year in Philadelphia, alone at 75 cts. to \$1.00 per dozen, all under the name of "Rice-birds." Robins and Meadow larks were not included, though thousands were also sold. I would advise the Rev. Mr. Clementi to make a tour in the United States to lecture on the cruelty of eating robins, *God's birds*. I hope to read no more of these strictures as it might perhaps add vim to my pen. Do they think they have written me down? In regard to the tradition of the robin picking a thorn out of Christ's head, I consider Mr. Clementi the pious composer. Again if the English robin had its breast dyed by our Saviour's blood, it is surely neither an unreasonable nor irreligious idea, to expect the dyed feathers to be a blood color which they are not, and if a miracle had been performed it would have been true to the color of blood and not blotched, or, if true to color, then His blood was like no other mortals. How does the truth of this tradition tally with fact and colour? Will Mr. Clementi explain, as Robin red-breasts are neither found in the Holy land, nor is it mentioned in the Bible as far as I am yet aware?

JOHN H. GARNIER.

Lucknow, Oct. 1st, 1881.

DEER HORNS.

SIR,—I wish to ask yourself or readers of the NATURALIST the reason that on a two year old buck, one horn has grown about five inches, and the other only shows above the hair. I have a buck and doe, and this is the way his horns have grown. The doe is last Spring's fawn; large for its age. Both are very tame, eating readily from my hand. Forty Dollars will buy the pair.

Yours,

R. B. SCRIVEN.

Gravenhurst, Ont.

NOTE.—We cannot positively say what is the cause preventing the growth of the second horn of your deer. It may be that the skin

covering the tips of the horn was injured when it started to grow, thus stopping the circulation of the vital fluid passing under it. The horns carry the skin from the base until they are full size, and while the thin skin is attached to the them the horns are soft and easily injured. We have seen many bearing marks of injury received while they were covered with the velvet skin.—C.

A GENERAL DELUGE.

BY G. W. BROWN, M.D.

(From Our Home, and Science Gossip.)

The gases continually escaping from the interior of the earth, bringing along with them a vast amount of scoria, through the immense volcanic craters of an earlier period, reduced the amount of molten mass within, and unfitted it longer to sustain the heavy crust resting upon it. After rocking, heaving and swelling for a time, like a ship on a billowy sea, fissures were formed, the compressed gases escaped, the crust fell down upon the fiery mass, leaving the Andes, Rocky, Himalaya and other great mountain chains to mark the site of these magnificent operations of nature. Tranquility followed for a time when lesser disturbances ensued. The violent agitations of the crust of the earth everywhere ruptured the inflexible rock, sometimes leaving wide spaces into which were injected the molten mass from below, forming the perpendicular veins of metamorphic rock, the admiration of all who look upon it.

With the subsidence of a continent, beds of oceans were elevated, and the waters, in seeking their equilibrium, swept over receding continents, perhaps engulfing them until another great upheaval followed. Amid these awful paroxysms of a convulsed earth, the principal inhabitants were swept away. The few survivors, with no historic records, communicated from generation to generation, in their rude language, as clearly as they were capable, an account of these wonderful and startling operations of nature. Wherever survivors remained each had a vivid recollection of the grand cataclysm, and imparted his impressions of it to his successors, and thus on from parent to son through all the ages.

The present eastern coast of Asia may have been the western coast line of a submerged continent. The Adam and Eve of Hindoo, Assyrian and Hebrew story may have been the only survivors of some of these grand

operations of a convulsed globe in some locality, while Noah and his family may have been the remnants saved in another. Or each may have been survivors of widely separated occurrences to which we have referred.

A portion of the inhabitants may have been saved by boats, corroborating the traditional account of the aborigines of America, as well as the mythical and sacred books of different nations.

This view of the subject best explains the difference of species of animals, living representatives of which have been long extinct, their bones however, frequently found deep in the earth. By some of the swells of the ocean, during these paroxysms, a whole continent would be swept over, and thus the Bible expression, "all the fountains of the great deep were broken up," is as correct as expressive.

The American continent, with its pre-historic mounds, the products of an ancient and long extinct race, may have been swept away by some of these gigantic ocean waves, when the waters were seeking their level, though the continent itself was not permanently submerged. A few inhabitants may have escaped, who chanced to be on mountain tops. They were the progenitors of the red man, found here by our European ancestors. As the water receded to its former bed, with the return wave, and rested but a short period on the surface, the general face of the country, save as regards vegetable and animal life, was but little disturbed. If this tidal wave swept from the south-east to the north west, we can account for the treeless prairies, all verdure being destroyed, followed on the subsidence of the flood by grasses which were the readiest to take root, the seeds of the forest being less tenacious of life were destroyed with the parent tree.

It is not probable all the continents and islands were submerged, nor all upheaved at the same epoch. Were such a catastrophe to again visit our earth, which is not at all improbable, because of the molten mass still reposing in its bosom, the western coasts of the Ameri-

* NOTE:—Classical writers inform us that Deucalion reigned over a part of Thessaly. In his age, say they, some 1,500 years before our era, the whole earth was overwhelmed with a deluge. The impiety of mankind had irritated Jupiter, who resolved to destroy the race. Immediately the whole earth exhibited a boundless sea. The highest mountains were climbed by the frightened inhabitants, to escape the rising waters. This seeming security was soon overtopped by the swelling flood, and no hope was left of escaping the universal calamity. Prometheus advised his son, Deucalion, to make himself a ship, which he did, and by this means escaped with his wife the general disaster. The pigeon and olive branch play their part in this as in all other narrations of the kind, showing a universal paternity somewhere.

can continent might be depressed below the sea level. The Pacific would soon establish an equilibrium. The large amount of water required would denude other portions, Possibly Australia, with the thousand islands of the eastern archipelago, would rise into the dignity of a continent with hills and vales, and inland seas. Dense forests of verdure, abounding with animal life would soon complete the beautiful picture, and give us the realization of a new continent, rising from the sea, like Venus in classic story.

Cosmogonists have been too much in the habit of predicating their ideas of creation on the accounts found in their "sacred books." Instead of entering the great field of inquiry, reading the rock-records "engraved by the finger of God," and making proper deductions therefrom, thinking and writing for themselves, and building up a science conformable to the teachings of Nature—which cannot misrepresent,—they have been content to borrow the narrow theory of some person who lived in the deep past, whose ideas were drawn from an uncultured fountain, and who had not sufficient data on which to establish any great scientific truth.

The human mind was no more content to remain inactive four thousand years ago than now. The people then found the earth substantially as we see it to-day, and peopled as it is with inhabitants. Reason taught them that all this had a beginning. The easiest way to explain to the ignorant masses, orally taught by the better-cultured priests, and quite as satisfactory to an uncultured population, was the story originally copied from the Babylonian records, transcripts of which were found by Layard in the ruins of Ninevah, where they had been concealed for more than 3,000 years by the sands of the desert. Our writers, conscious of the deep-rooted attachment of the populace to their sacred books, have labored to educate the common mind, by harmonizing their knowledge with prejudiced public opinion on this subject. This should not be. The time has come when the Truth should be taught, and if Error suffers it is not the fault of the truthful teacher, but of him who taught the original error.

Our world is older than even scientific thinkers have generally supposed. These thinkers found the earth as it is, and were ready to take for granted that its population, with man and the lower forms of life, began with the present order of things.

(TO BE CONTINUED.)