

Lemon juice and rich stock or *consommé* is to be added, and the whole reduced to the consistence of a *purée*, whose heat is to be kept up in a water bath. This may be served with white meat, game, fish, eggs, vegetables, &c., and if properly prepared makes an elegant sauce. *M. J. B.*

**DEVICES OF THE FOX FOR ESCAPING FROM HIS PURSUERS.—(See Feb. 4, 1860.)**

I HAD determined to venture a remark or two on the last of these devices, when the arrival of three large birds in the flesh from Canada gave me other occupation. On dissecting them I found their interior parts as uncorrupt as though the birds had been killed on their reaching Liverpool.

But to the fox escaping from his pursuers. The account informs us that some 10 feet below the edge of the cliff there was a kind of break in the strata of stone a foot in width. Now, by means of his claws, the fox let himself down upon this break.

No animal as large as a fox, saving men and monkeys, could let itself down by means of its claws. Certainly men and monkeys can occasionally lower their bodies down a cliff. But no fox could ever perform such a feat. His claws would avail him nothing—literally nothing. In the present instance our fox would have been obliged to go over the cliff head-foremost, and there would have been fearful odds against his effecting a safe

Mr. Darwin would agree with you, for it hardly comes within his principle, which denies to natural selection any power to act, unless the variation acted on be "favourable to the variety" in battling with its neighbours in "the struggle for life." Now though the many heads may be very advantageous to the cook or the market gardener, it is doubtful whether, in a crowded society, they would help a plant that had them in pushing itself forward toward the light. For, in a struggle, the lateral heads would become etiolated and abortive by the close contact of neighbouring plants, and the terminal head would alone have a chance of pushing forward and forming seed. Meantime, the new variety would be spending its strength (like a Protectionist) in favouring a non-paying "manufactory." Clearly, therefore, the old, one-headed Cauliflowers, unburdened with unprofitable speculations and concentrating all their energies on one result, would stand the better chance of turning their "crown into a pound." But, be this as it may, I wish now to call the attention of your readers to another monster, which, by a curious coincidence, appeared at Kew about the same time that Mr. Darwin's book appeared in Albemarle Street, and which, if I interpret it aright, speaks much more forcibly against the truth of Mr. Darwin's hypothesis than your Cauliflower, on the most favourable interpretation, says in its favour. I allude to a monstrosity in *Begonia frigida*, figured in "Botanical Magazine," t. 5160, Fig. 4, and thus described by Sir William Hooker:—"Our artist, Mr. Fitch, while making the drawing, detected a curious morphological structure in the fact of one of the flowers having an inferior perianth of four very unequal sepals (such as are indicative of a male flower); and above their point of insertion are four stamens (apparently perfect), alternating with four superior, free, ovate ovaries, each with a short style, and two downy linear stigmas. It is to be regretted that no section was made of these ovaries, which from situation and in form so little resemble the three-celled, inferior fruit of *Begonia*." To this account I may add that Dr. Hooker assures me that the ovules appeared to be normal, such as might have been fertilised. Let us suppose that they were perfect, and had been allowed to seed; every gardener would anticipate, I presume, that some of the progeny at least, if not all, would have borne similar flowers. Now, had this occurred in a state of nature, and had a botanist collected a plant with such flowers he would not only have placed it in a distinct genus from *Begonia*, but would probably have considered it as the type of a new natural order. Can it be possible, then, that genera and even natural orders, spring up like Mushrooms in this sudden manner? According to Mr. Darwin's hypothesis, the thing is impossible; for it would have required hundreds, perhaps thousands of successive generations to have enabled "natural selection" to convert an inferior ovary and unisexual flowers into a superior ovary and bisexual flowers. If there be one thing more frequently iterated than another in Mr. Darwin's book, it is this; that "it is fatal to my theory" if changes be not slowly progressive; by the accumulation of small increments from generation to generation; increments which, at first, may be only obvious to a breeder, but which, "bred up to" continuously, are sufficient, through "natural selection" alone (as we are told, p. 186) to change the eye-speck of a medusa into the human eye (if not to transform a slave-making ant into a southern states-man). If time be only long enough, and generations and divarications of form many enough, according to the theory, not only such things may be done, but they have been done! But a sudden



AGARICUS NEBULARIS.

ral size. (Copied by permission from Greville's Scottish Cryptogamic Flora.)

landing on a break 10 feet below him, and only "a foot in width." Had this most impossible device of a modern fox taken place in ancient days it might have succeeded by means of a metamorphosis; that is, by transforming the fox into a monkey.

Ovid distinctly states that Actæon, the famous hunter, was changed into a stag and got worried by his own hounds. "Dilacerant falsi, dominum sub imagine cervi." And Hecuba, once Queen of Troy, became a female of the dog tribe towards the end of her days, and sadly annoyed the neighbourhood with her incessant howlings. "Latratu terruit auras." Unless this fox had got into the body of an ape and made use of its hands, I cannot believe in the "device," but must consider it the production of some inventive wag unskilled in zoological anatomy. Adieu, Renard of modern times. Thou hast added another fable to the many which thy cunning family has invented for nurseries during the long and dreary nights of winter. *Charles Waterton, Walton Hall, Feb. 12.*

**Home Correspondence.**

*Darwin on the Origin of Species.*—In a recent number of the *Gardeners' Chronicle* you figure a monstrous, many-headed Cauliflower, and, in making some editorial remarks upon it, you suggest that it possibly throws some light upon the way in which species, according to Mr. Darwin's theory, originate in Nature. I am not quite sure that, as respects this particular Cauliflower,

change, like that hinted at by our *Begonia*, was not contemplated by Mr. Darwin's hypothesis; and if such should ever be established, if seeds should ever be raised from such a flower, and should breed true then the theory would receive a serious damage, and a few such cases would overthrow it altogether. For, says Mr. Darwin, at page 206:—"On the theory of natural selection we can clearly understand the full meaning of that old canon in natural history, 'Natura non facit saltum.' This canon, if we look only to the present inhabitants of the world, is not strictly correct, but if we include all those of past times, it must by my theory be strictly true." It might be easily shown by quoting other passages that the theory, strictly taken, denies not only a "saltus" but a "gradus," and proceeds by a sliding-scale. But let us confine ourselves to the saltus. Is it not a saltus for a plant, at one bound, to change an inferior ovary and unisexual flowers to a superior ovary and bisexual? Would not such a fact, if fairly established in the vegetable world, be almost as wonderful as if a Rhinoceros were born of an elephant? And are we quite sure that such a fact has not occurred in Nature? I merely throw out as a hint—not as asserting a truth or even a probability, but merely as a hint, hypothetically put—that there are two natural orders of plants which have so many indications of common affinity that they were placed near together by Mr. Brown; but which differ from each other nearly by the very same characters as those

by which our monstrous Begonia differs from its normal parent. The orders I allude to are Aristolochiaceæ and Nepenthaceæ. Aristolochiaceæ, like Begonia, has an inferior ovary of 3—6 carpels; Nepenthaceæ, like our monster, a superior ovary of 4 carpels. On theoretic principles, it is probable that Nepenthaceæ is the newest type; for it is not (as yet) generically diversified, its flowers are 4-merous, its embryo more fully organised, and its geographical range more limited; and, as we are supposing, we may further guess that if Nepenthes were born "per saltum" from an Aristolochioid, it was some such genus as Trichopodium or Asiphonia that performed the part of cuckoo-parent. I use the term "cuckoo-parent" advisedly, for I should consider such an origin to be as true and as miraculous a creation (not "manufacture") of a new type as if it had pleased the Divine Creator to call up, without seed, from the dust of the ground, a new organism, by the power of his omnipotent word. *W. H. Harvey, Trinity College, Dublin, Feb. 10.*