

**IF INSECTS WERE AS LARGE AS ELEPHANTS.**

If modern man had existed in the period of the giant lizards, it is possible that he might have had a clearer conception of the strenuous life than he actually possesses. This thought is suggested by the ingenious humor of our contemporary, the London Sketch. In the SCIENTIFIC AMERICAN of May 25, we published a number of illustrations of insect models from the American Museum of Natural History. Our contemporary, noticing these fearsome "beasts," conceived the idea of introducing some of them into pictures with men and women, where the insects would outrank the humans in size. The results are so entertaining, that for once we rather extend the scope of our pages, and reproduce these pictures for the amusement of our readers.

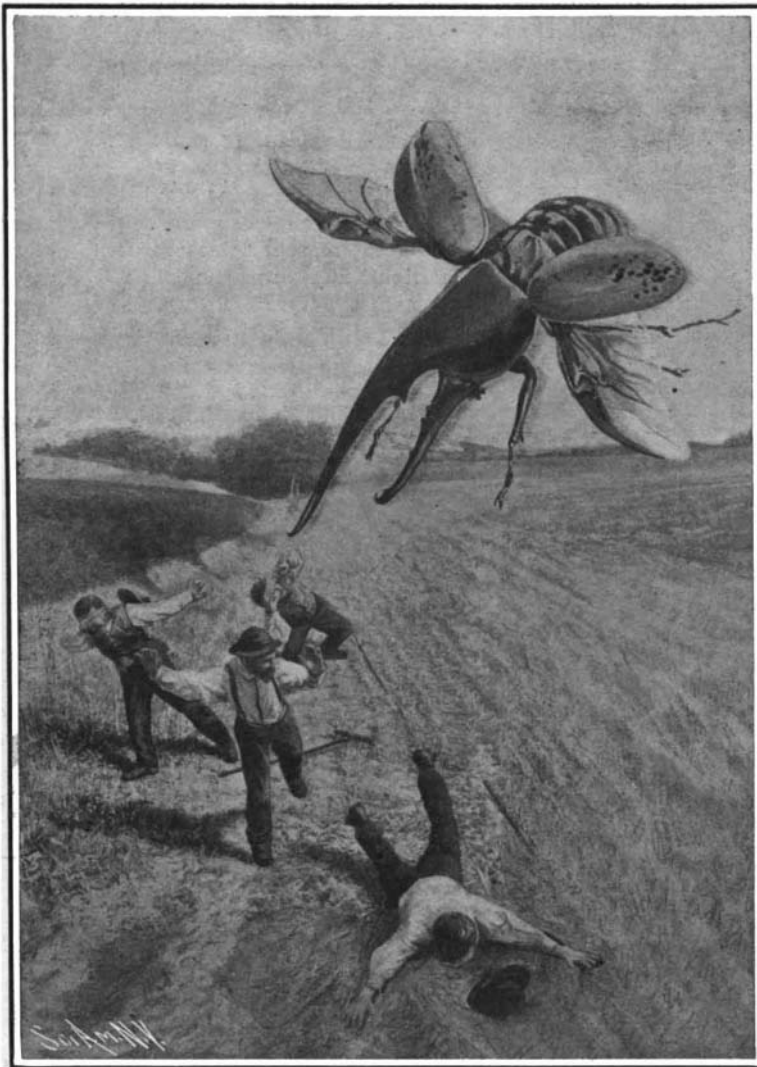
The idea is not new; a few years ago an English author wrote a novel, in which the discovery of a wonderful concentrated food led to a growth of hornets a yard long, and rats as big as horses. The final result of this upsetting of nature's balance was, that man adapted himself to the new order of things, and continued to control nature. The conclusion was a correct one.

If, through the working of some miracle, we were suddenly deluged with monster insects, the infliction would probably be less terrible than appears at first glance. The larger an animal becomes, the less able is it to stand against man. The elephant, which lives to a century and can kill a man with a blow of its trunk, will soon be extinct, unless means are taken to preserve it, while a small creature such as a rat or a mouse holds its own in the busiest city. The bison has vanished from our prairies—a victim to its size. If mosquitoes grew to resemble greyhounds, it is fair to assume that they would no longer lay innumerable eggs, as they do at present. Both the larvæ and the flying insects would be fair game for sportsmen, and probably in a year or two the insects would be extinct—except in our zoos. It is not the visible which is terrible to man. Wild beasts, storms, or accidents account for comparatively few disasters. It is the minute and unnoticed that spreads disease. For centuries man has suffered from the ravages of plagues—suffered chronically and as a matter of course—to an extent scarcely conceivable to this generation. The nineteenth century was well advanced before people began to fairly understand what are now considered the very rudiments of health;

now our scientists have got a firm grip of the situation; and if some new condition arose, they would gradually find means to control it.

The illustrations suggest feelings of regret rather than terror. Those tree-hoppers appear to be placid,

terrible, for his intentions are evidently hostile. But we can well imagine him changed from the hunter to the hunted. Those ferocious jaws of his might solve the problem of the diminishing supplies of whalebone, and his wing membranes might supersede crocodile hide for purses. Doubtless a use would be found for every part of him, and he would soon grow scarce. The tree-hoppers have four wings. They would solve a vexed problem for us. We may imagine a long line of "heavier-than-air" fliers racing over a measured course in competition for the "blue ribbon of the air," the SCIENTIFIC AMERICAN trophy.

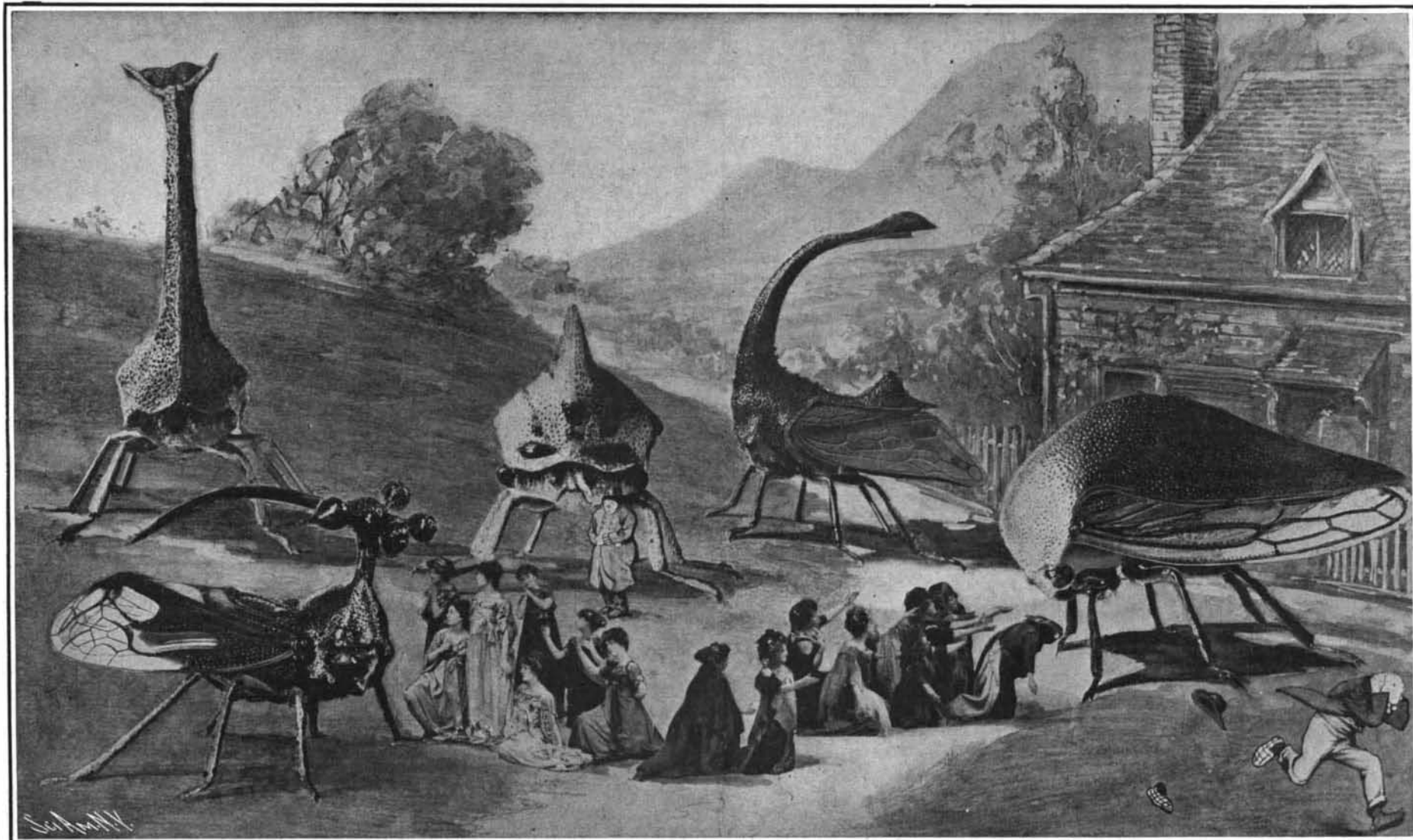


Country Life—As It Might Be.

amiable creatures, and we cannot believe that either the beseeching damsels or the terrified policeman are in any danger of furnishing a meal. If only we could capture a few of them, and break them in to work, we might find that we had tapped a practically inexhaustible supply of cheap horse-power. The beetle is more

A report has just been made to the Paris Academy of Sciences by Dr. Fortin, an eminent optician of France, which is now attracting the attention of physicians throughout the civilized world, inasmuch as disease of the eye has been the most difficult to contend with in all the range of medical and surgical science. Dr. Fortin's new contrivance in the diagnosis of the eye is a confirmation of the physical organization of our organ of vision, a practical application of which has been the dream of students in this branch of science for years. The physicians who are investigating Dr. Fortin's theory find that the light from a mercury-vapor lamp passing through two sheets of blue glass and reflected into the eye by a large lens reveals the internal condition of the eye infinitely better than ordinary white light. By placing a screen with a pinhole between the light and the eye, a magnified image of the vessels at the back of the retina, which has heretofore been invisible, has been obtained. This discovery in optics is regarded as one of the most advanced steps in this field of science, judging from the comments of eminent physicians on the recent report of the French Academy.

The multiplication of hotels in New York has not resulted in an oversupply of accommodation, as many old-line hotel managers have feared. The latest notable building is the new Plaza Hotel, which opened on September 23. A few years ago a large modern hotel was erected on this site, but the owners saw possibilities for improvements, and so the old Plaza Hotel was razed to the ground and the new one built; the cost, including the scrapping of the former building, is about \$12,530,000. The success of the investment seems assured.



Fortunately the Tree-Hoppers Are Herbivorous, But Their Aspects Are Sufficiently Strange to Inspire Terror in Timid Bosoms.

A composition from The London Sketch adapted from specimens previously published in the Scientific American.

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