

## A HAIRY ELEPHANT.

Some time since the attention of scientific men, and especially of naturalists, was directed to a couple of very extraordinary elephants imported from Sumatra. One of these creatures, although full grown, was no larger than a goat; and the other, here illustrated by a drawing from a photograph, though larger, was still more noticeable on account of the singular approximation exhibited in shape and general appearance to the extinct elephant or mammoth (*Elephas primigenius*), the resemblance being still further enhanced by a heavy growth of rusty brown and black hair. This hair, as shown in the illustration, is thickest on the chin, head, and along the back, on which it forms a sort of mane. The lowness of the forehead, the peculiar situation of the eye and ear, the abrupt falling off at the hinder quarter, are features peculiar to this creature among living elephants, and irresistibly remind one of the restorations of the mammoth given in encyclopedias and text-books.

In order to show this more clearly, drawings of the heads of the two living species, the Asiatic and African, together with that of the restored extinct Siberian elephant, are given. As is well known, this last species has been found in Siberia in a frozen state, beautifully preserved, with the hair and tissues in so excellent a condition that microscopical sections have been made of them, and these two agree in appearance and character in a very remarkable manner with those of the animal represented. Can it be that this is an instance of what is called by Huxley "breeding back," or is it only a sport of nature, one of those experimental varieties occasionally thrown off from the parent stock, that are, according to the development theory, the origin of new species? In either case it comprises a state and collection of facts that involve questions for discussion and decision of the greatest possible interest to naturalists. Nor is the likeness this animal bears to the Siberian mammoth one based upon a merely supposititious restoration, for these extinct elephants are discovered from time to time in as excellent a state of preservation as if they had recently died. No less than four such animals have been discovered since the beginning of this century, the last one as late as eighteen hundred and forty-six. A young Russian engineer, Benkendorf by name, who was employed by the government in a survey of the coast of the mouth of the Lena and Indigirka, was dispatched up the latter stream in the year mentioned, in command of a small iron steam cutter. He writes the following account to a friend in Germany: "In 1846, there was a most unusual term of warm weather in Northern Siberia. Already, in May, exceptionally heavy rains poured over the moors and bogs, storms shook the earth, and the streams carried not only ice to the sea, but large tracts of land thawed by the masses of warm water furnished by the southern rains."

After an eight days' journey, meeting many hinderances and perils from the ice floods and drifts, Benkendorf and his companions reached a place called Ujandina. Here they found the river had torn itself a new channel, leaving in its former bed only an insignificant stream. "Afterward," he says, "we landed on the new shore, where we made a wonderful discovery. The stream tore up the soft, wet ground like chaff, so that it was dangerous to go near the brink. Suddenly our hunter, always vigilant, called loudly and pointed to a strange, misshapen object, which rose and sank in the boiling turbulence of the waters. I had seen it before, but had not noticed it particularly, considering it only driftwood. Now we all hastened to the spot on the shore, had the boat drawn near, and waited until the mysterious thing should again show itself. Our patience was tried, but at last a black, horrible, giant-like mass was thrust out of the water, and we beheld a colossal elephant's head, armed with mighty tusks, with its long trunk moving in the water in an unearthly manner, as though seeking for something lost therein.

"Breathless with astonishment, I beheld the monster only twelve feet from me, with his half-opened eyes yet showing the whites. . . . Picture to yourself an elephant with a body covered with thick fur, an elephant thirteen feet high and fifteen feet in length, with tusks eight feet long, thick, and curving outward. The animal was fat and well grown; death had overtaken him in the fullness of his powers. His great ears lay fearfully turned up on his head. About the shoulders and back he had stiff hair, about a foot in length, like a mane. The long, outer hair was deep brown and coarsely root. The top of the head looked so wild, and was so penetrated with pitch, that it looked like the rough bark of an old oak tree. On the sides it was cleaner, and under the outer hair there appeared everywhere a wool very soft, warm, and thick, and of a yellow-brown color. The giant was well protected against the cold. The whole appearance of the animal was fearfully wild and strange. It had not the appearance of our present elephants. Its head was rough, the brain case low, but the trunk and mouth were much larger. The teeth were very powerful. I could not divest myself of a feeling of fear as I approached the head; the broken,

widely opened eyes gave the animal an appearance of life, as though at any moment it might start up, and with a ferocious roar destroy us."

Much in this graphic description, making allowances for the comparatively pygmy proportions of the Sumatra elephant, reminds one of its appearance. It is nevertheless a very intelligent animal, and has been taught many tricks, among which may be adduced that of riding on a velocipede and walking a tight rope. It was lately in the possession of Mr. Reiche, the celebrated importer of wild animals, and the photograph from which the illustration appended was copied, was taken on his private grounds at Hoboken, New Jersey.

## Fire Escapes.

After each large fire wherein the inmates of buildings, being cut off from egress, meet with fatal results, there is a general cry for a more rigid enforcement of the law compelling owners of large blocks and hotels and workshops to erect suitable fire escapes. Now, the question arises, What constitutes a suitable fire escape? In the first place, I would like to argue *pro* and *con*, regarding the fire escape that is generally used now—a common iron ladder bolted either to the front or side of a building, as an example we will say a hotel. Now, in case of a fire, this is all that is desired to save a man's life under certain conditions; that is, provided a man is a sailor, used to climbing, and also that he sleeps in the same room that the ladder reaches. But with circumstances other than these, a ladder is a mere mockery, for the following reasons: It is never to be supposed that one woman or child in a hundred would have presence of mind enough to first find and then descend a ladder. Again, the persons whose rooms the ladder reaches, upon retiring lock and bolt their doors, and very likely in case of fire will quickly descend the ladder, leaving those whose rooms are not so favorably situated to escape as best they can. I have never yet learned where a stationary ladder was the means of saving human life.

The Milwaukee hotel fire, a few years ago, gives us a good example of the inefficiency of the stationary ladders upon that building. Nearly all the inmates were so excited that they could not act for themselves, but even those who would do so were driven back by the dense smoke, and in order to keep from suffocating were obliged to stay at the windows, and as a result were slowly burned to death. At a recent fire chiefs' convention, the opinion was given that a fire escape that depended upon the inmates of buildings for action was practically useless.

What is needed is an escape that is manipulated by persons on the ground—one that can be raised, lowered, and moved to any window in the building, and rescue three or four men, women, or children at one time. There are patent fire escapes innumerable, some embracing ideas that are without doubt very ingenious, but they all contain this one great fault, they are not handled by persons on the ground. Again, architects and builders should take into consideration the fact that fire escapes, as they are now made, are not an enhancement to the good appearance of buildings.—F. C. B., *Amer. Builder*.

## Excavations at Pompeii.

A correspondent writes as follows to the *N. Y. Journal of Commerce*:

It seems odd to speak of a dead city as a growing one. But that is exactly the case with Pompeii. There are many cities in Italy that do not grow half as fast as the one buried by the ashes of Vesuvius 1,800 years ago. A person visiting it at intervals of a year notices a marked enlargement of its boundaries. The Italians, you know, are the champion diggers. They make the shovel fly when they attack the grave of Pompeii. We saw a gang of them at work there. A Government overseer watched them like a hawk. He wanted to be sure that they pocketed no jewelry, coins, or objects of art or utility yielded by the excavations. The only produce of their toil in that line as we stood by was a bit of iron, which the guide called a hinge, and the fragment of a small marble column. The spades busily plied were gradually bringing to light a beautiful house. The floors were mosaic, with simple but graceful designs in scroll pattern—nearly as fresh of color as if laid yesterday. The walls bore frescoes of fainter tints—grinning masks, fawns, cupids, birds, fish, and fruit. It had evidently been the home of a well-to-do citizen of Pompeii. The nervous movements of the workmen betrayed their anxiety. They were hoping at every moment to make a valuable "find." Perhaps they might hit upon a great iron chest, studded with round knobs like a boiler, and full of gold, money, or ornaments, or they might strike another wonder in marble or bronze, or they might be startled by coming suddenly upon a skull or other human remains. In the latter event, the work is suspended till a careful inspection is made.

The responsible and intelligent person in charge proceeds to ascertain if the dead Pompeian has left a mould of himself or herself in the plastic ashes. If

so, he prepares a mixture of plaster of Paris, breaks a hole in the crust, and slowly pours in the liquid till the mould is full. When it has hardened, the casting is tenderly removed. Lo! there is a rough image, showing some poor creature in the agonies of death, prone on the floor, face downward.

Thus, most usually, were the inhabitants of the doomed city caught by the destroying angel. The skull, or leg, or arm, or whatever other part of the skeleton has not relapsed into its original dust, may attach itself to the plaster cast in the proper place, or may require to be joined on by a pardonable "restoration." In either case, the effect is thrilling in its horrible reality. Nothing in painting or sculpture can shock the beholder more than these self-produced and truthful statues exhibited in the museum, which is the first and most interesting thing shown to visitors. But, though neither gold nor silver, nor the minutest scrap of a skeleton, nor anything else of importance was unearthed for my benefit, I quitted the new excavations with reluctance to examine those parts of Pompeii with which the world is already familiar through the medium of books and pictures. I found myself quite at home in the bakery, the wine shop, at the oil merchant's, at the houses of Pansa, of Sallust, of the "Tragic Poet," and the rest. The high stepping stones across the streets looked familiar, as if I had trodden them before. The deep ruts cut by the carts as they groaned up the hill, coming from the ancient Stabia, were like friendly landmarks. So fully have literature and art made us acquainted with this disinterred city.

The guide tells me that only about one-third of Pompeii has yet been uncovered. I take his word for it. He is also of the opinion that the best parts of the city have already been dug out. He evidently wishes that the work would stop. He is very human in this, for he finds it tiresome to show people about the present Pompeii. Treble its size, and his labor would be threefold. And he is forbidden to accept money. But I imagine that this very stern prohibition does not prevent persons from offering him (say) a couple of francs on "the sly," or him from accepting them.

It may be true, as our guide insists, that the temples, forums, baths, theaters, and fine houses now above ground surpass anything of the kind that may hereafter be discovered at Pompeii. But the Italian Government is not disposed to take that for granted. Liberal sums are yearly appropriated to push on the work. It bears fruits. A new temple or amphitheater may not be struck every year, but something is constantly being turned up to instruct the world in the manners and customs of the old Romans, so well reflected in the representative city of Pompeii. Of bronze or stone statues, household implements, and tools of trades, the yield is immense and steady. These may be counted by the thousand in the splendid museum at Naples. One can see so many articles of luxury and use exactly similar to those he buys nowadays, that he is fain to pause and try to remember what besides the steam engine, the photograph, and the electric telegraph we moderns have invented. There being no more room at Naples to store these treasures, the excess of them is huddled together in the courtyards and houses of Pompeii herself. It is estimated that at the present rate this mine of antiquities will not be worked out in fifty years.

## Machinery and its Possibilities.

Those who entertain the opinion that the possibilities of labor saving machinery are nearly exhausted, and that the whole field of art industry in which it may be advantageously employed has been already covered by inventive genius, are greatly mistaken. That the achievements of human ingenuity have been wonderful goes without saying, and there are reasons to believe that future triumphs in this direction will be even greater and more fruitful. We are forced to this conclusion by reason and analogy. Who would have believed, only a very few years ago, that the difficult and complicated processes which are now every day being wrought out by machinery in various branches of manufacture would have been possible? Thus it is that the problems unsolved by one generation become accomplished facts by another. Who shall say that what now seems impossible and improbable may not be successfully attained by those who will come after us? In the hands of the modern scientific inventor, matter becomes almost miraculously endowed with life and intelligence, and with great accuracy performs those functions which the most skilled manual labor executes but slowly and imperfectly.—*Manufacturers' Gazette*.

A MAN in London proposes for a paltry sixpence to furnish a miraculous preparation that will enable any one to turn pennies into sovereigns. The writer recollects in his boyish days that he tried to convert pennies into silver quarters with a solution of nitrate of mercury, and the trouble he experienced was not merely that he could not pass the transmuted coin for 25 cents, but the storekeeper was reluctant to receive it for its true value, one cent.