

AFTER ALL, WHAT A SMALL WORLD THIS IS!

By Constructing a Miniature World of Wax and Plaster a Young American Has Devised a Way of Staging the Dramas of Geography and History—The Science of Ethnology Loses Its Terrors When Studied From Such Pictorial Textbooks

LEAVING the fertile pampas we come to Patagonia, a stony desert, made up of debris from an ancient mountain range. The only export is wool." After which hasty and mildly reproachful characterization my school geography proceeded to

ural History, on some of their reptile groups. The museum, I believe, started the scheme of showing birds, animals and reptiles against backgrounds that suggested their natural environments. It occurred to me that these groups could be made more dramatic and convincing if the figures were reduced in size and shown in a setting that would actually reproduce a section of their favorite haunts. Later I decided to include human figures in the scenes, in order still further to increase the dramatic interest.

"That is not a new idea, understand; it is merely a combination of several existing types of groups. The one feature that really is entirely new, I think, is the plan of putting gauze in front of the scenes in order to heighten the atmospheric effect and installing a special lighting system for each group.

"Take this arctic scene," he continued, turning to a completed group. "It is lighted by a real, miniature *aurora borealis*, projected through a 'cut-out' mask at the top by means of a powerful incandescent lamp. You couldn't possibly get the same effect by painting the

By DEEMS TAYLOR



The name "Patagonia" means something after you have seen this group.

Mr. Franklin is in turn painter, sculptor, carpenter, plasterer, woodcarver, costumer, archaeologist, biologist, botanist and electrician. In planning a group he first makes a preliminary sketch of the proposed scene in oil or water color. This is submitted to his client for approval and suggestions. He next builds a cardboard model, on a very small scale. After this comes the actual construction of the finished group.

The background is a curved sheet of galvanized iron, on which is painted the sky and, in some cases, the distant landscape. The foreground is modelled in plaster on a framework of wire netting. The figures of people or animals are modelled in wax.

Everything must be in proportion, and everything must be absolutely correct. The costumes must satisfy an ethnologist, the birds must satisfy an ornithologist, the vegetation must satisfy a botanist—everything in the group, in fact, must be sufficiently perfect in detail to pass muster with a specialist. The amount of study and labor this entails is necessarily enormous.

In one of the arctic groups, for example, ap-



either by tinted glass or by plaster moulded into ripples, shellacked and painted. In the jungle group illustrated on this page the tree trunks are small tree branches; the *banas* are grapevine tendrils, and the ferns are cut from paper, waxed and painted. The cleverest



On the left a band of Masai (British East Africa) lion hunters are launching an offensive in the Brooklyn Children's Museum. Colonel Roosevelt's lion hunt took place in the Masai country.

The penguins on the right add the needed touch of comedy to an Antarctic group. In the original group they stand about two inches high.



leave Patagonia flat—which, indeed, it is. Naturally, Patagonia for years a yellow primrose was to me. In fact, the other day, when I saw some of Dwight Franklin's geographical groups and found one of them labelled "Patagonian Indians on the Pampas," it was somewhat of a shock to me to find that Patagonia is inhabited at all. My school geography used to be so much more interested in boundaries and principal products than in people.

These groups are in the Brooklyn Children's Museum—six of them; and he is making five more, to be installed early in the fall. When I went up to his studio last week he was putting the finishing touches to a group of penguins that were to furnish the note of human interest for an antarctic scene. I suggested a polar bear.

"Polar bear, nothing!" he said. "There are no polar bears in the antarctics, any more than there are penguins in the arctics. The two don't get along well together."

Now that just shows how much better educated I'd be if there had been some Franklin groups when I studied geography. There's a good deal of difference between reading a thing in a textbook and seeing it for yourself. And though these groups are made on a very small scale—one inch to the foot—they are so perfect in color, detail, and perspective that they create an astonishing illusion of reality.

"I first got the idea for these about three years ago," Mr. Franklin said, "when I was working up at the American Museum of Nat-

aurora on the sky and then lighting the group from the front.

"In the Masai hunting scene the time is supposed to be sunrise. Consequently, instead of running the distant hills right into the sky, as I usually do in groups of this sort, I left a space of about two inches between the hills and the back drop. Concealed in this space I have an incandescent lamp burning behind a deep orange color screen. This casts up a dull glow that approximates surprisingly well the effect of sunrise.

"The Patagonian and antarctic groups are illuminated by lights shining through pale blue screens.

"I get atmospheric effects, too, by using different colored gauzes for the front. For the desert groups I use red gauze, to make them look hot. In the arctic and antarctic scenes I use blue."

Franklin's first group, made while he was still connected with the Museum of Natural History, was an Esquimau scene, executed for the museum of the Newark Public Library. This order was promptly followed by another, for a group of Newark Indians. By this time, 1914, he had decided to leave the American Museum and devote himself to his geographical and historical groups. The Newark groups came to the attention of the officials of the Brooklyn Children's Museum, who immediately ordered a series of twelve.

It requires a peculiar combination of talents to be a successful builder of museum groups.



Dwight Franklin at work in his uptown studio, putting the finishing touches to a Newark Indian.

Photo by Edwin Levick.

pears an Esquimau sledge. There is a real sledge on exhibition up at the Museum of Natural History, and Mr. Franklin spent two days in making an exact miniature duplicate of it. Each piece was made separately, and the parts were lashed together with thongs, exactly as the Esquimaus do it.

The Patagonian group is another instance of the high degree of accuracy that is necessary in this work. The Indian standing by the pony is wearing a peculiar kind of spurs such as are found only in Patagonia. They consist solely of a pair of pointed sticks which are lashed along both sides of his shoe, the pointed ends projecting behind. It took an hour to make a pair of these, but they are right.

The result of all this painstaking attention to detail is that every group is authentic from every point of view. It may be accepted as a pictorial textbook.

In the course of his work Mr. Franklin not only studies reference books and other museum exhibits, but obtains expert advice whenever possible. Colonel Roosevelt is authority for the correctness of the Masai group, for example. In making the Polar groups the artist obtained valuable assistance from Doctor Cook, the much-abused arctic explorer. As Franklin says, "The doctor may not have discovered the North Pole, but he's been a lot nearer than most of his critics."

The materials, of course, are seldom the same as those in nature. Water is represented

application of material that I saw was the use of transparent blown glass flames for the blubber lamp of an Esquimau igloo.

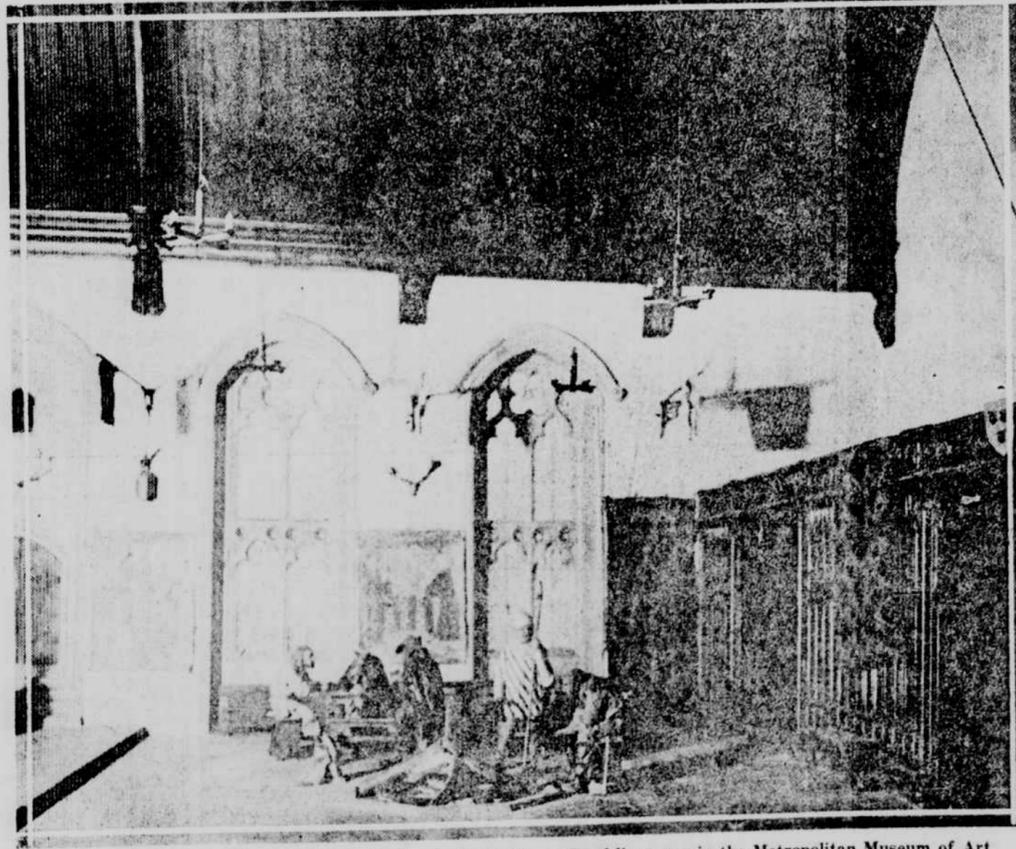
Mr. Franklin does not confine himself to geographical groups alone. His latest finished work is a model of the banquet hall of a medieval castle, which now stands in the Metropolitan Museum of Art. This group is about five feet wide by six feet in height, and represents the hall of Penshurst Castle, Kent, about the year 1400. Everything is historically correct. An architect drew plans for the room from photographs of the existing Penshurst Castle. Around the walls hang the coats of arms of all the Penshurst best families of the period.

It is probably in his figures that Franklin has been most notably successful, for it was in these that he ran the biggest risk of failure. If the human figures were not absolutely life-like, many of the groups would be simply burlesques. But small as they are, these little men and women are remarkably convincing. I got Franklin to photograph one of them standing by a telephone desk stand, in order to illustrate the relative sizes of the two, and the effect in the picture is that of a medium sized man by an enormous telephone.

The figure, by the way, represents Lieft Erickson, and is from the first of a proposed series of historical groups. I hope Franklin does them. He might succeed in turning a course in American history from an insomnia cure into something almost interesting.

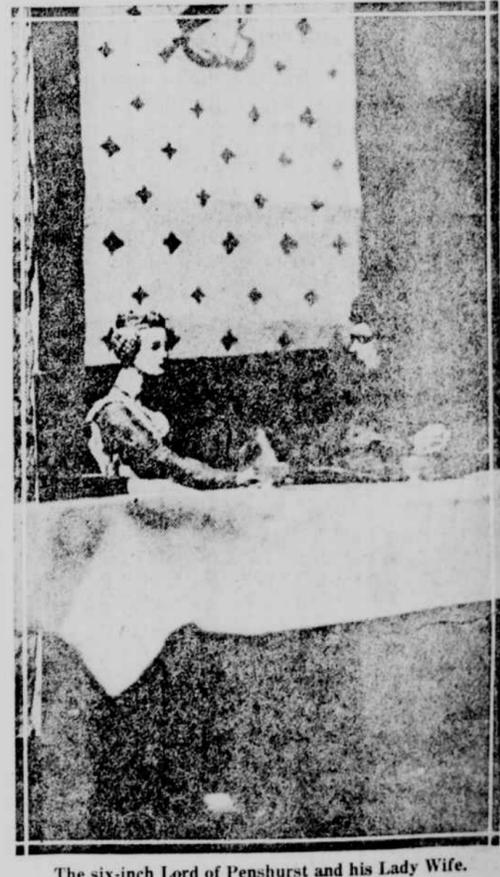


Shooting at a wax monkey with a straw blow-gun.



"The Banquet Hall of Penshurst Castle, A. D. 1400"—a Franklin group in the Metropolitan Museum of Art.

Photos by Paul Thompson.



The six-inch Lord of Penshurst and his Lady Wife.