

SHADOW-PICTURES AND SILHOUETTES.

Ever since there have been home walls for sunlight, fire-light, or lamp-light to fall upon, all of us children have been interested



"Big Jay's."

in shadow-pictures, and shadow-pictures nearly always have seemed glad to oblige us in all sorts of pleasant ways. Sometimes they give us Grandma's head and cap, showing sharp and clear upon the wall; sometimes dear little Bobby's curly pate and rollicking movements; or perhaps a big shadow-puss, gracefully waving a blurred shadow-tail on the white surface opposite the glowing fire-place; or, possibly, a shadow looking wonderfully like something that isn't in the



"The Shipping Squirrel."

room at all, just because somebody has flung a coat, or a hat, or a bundle, or what not, on table or arm chair. No matter what, it may be, one thing is certain. If any substance, living or inanimate, comes between a strong light and a wall, it must cast a shadow, and we can make something out of it or not, just as we please. All of you have sometimes seen the grotesque likeness of a person in the shadow which



"How the Peasant Spoke."

he or she unconsciously casts upon the wall, and have noticed

how impossible it is to keep the original quiet while the rest are merrily enjoying the picture. He or she is sure to turn to see what it looks like, and so spoil it all.

Now, if you wish to obtain a shadow-picture buy sheets of paper, black on one side and white on the other, which may be found at any stationer's and pin one of these sheets of paper upon the wall, opposite a lamp, with the white surface outward; then, after providing yourself with a well pointed pencil, place your sitter in such a position that a clear, strong shadow of the profile is thrown upon the paper. If your sitter (or stander) can now remain absolutely still, you have only to trace the outline of the shadow carefully with your pencil, taking care to work as rapidly as practicable. When the outline is all thus traced, you



"The Lion Duke."

can go back and repair any part that seems incorrect. This done, release your sitter and take the paper from the wall. Now you have only to cut out the picture close to the pencil-mark, and as the other side of the paper is black, you turn over your picture and paste it upon a sheet of white paper, and you can show your silhouette portrait in triumph to your obliging sitter, the whole thing having been accomplished in about five minutes. Many boys and girls become very expert in making these pictures,



"The Beakful Beak."

and, by seizing every available opportunity for tracing shadow-pictures of their friends, in time become possessed of a valuable collection of silhouette portraits. The excellence of the picture must depend very much, of course, on the skill of the draughtsman who traces the shadow, on the power of the sitter to remain quiet, and on the proper position of the lamp for throwing a clear shadow.

But long before these shadow-albums were thought of, people had found out a capital way of amusing little folks and them-

selves by making comical hand-shadows upon the wall. A very little practice enabled them to represent the heads and bodies of

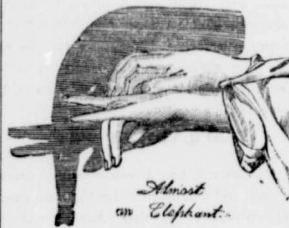


"A Bird in Flight."

various animals, and to set these one by one to snapping their jaws or taking little leaps upon the wall. In the accompanying pictures you will find designs, some new and some old, on which to practice your dexterous ingenuity.—E.E.

THE FATE OF A HERD OF BUFFALOES.

An army officer who about four years ago arrived in Chicago from the Yellowstone Valley, tells a story of what happened to a herd of buffaloes as they were migrating southward. The herd numbered 2,500 head, and had been driven out of the Milk River country by the Indian hunters belonging to Sitting Bull's band.



"Almost an Elephant."

When they reached the river they ventured upon the ice with their customary confidence, coming upon it with a solid front, and beginning the crossing with closed ranks. The stream at this point was very deep. When the front file, which was stretched out a quarter of a mile in length, had nearly gained the opposite shore, the ice suddenly gave way under them. Some trappers who were eye-witnesses of the scene said it seemed as if a trench had been opened in the ice the whole length of the column. Some four or five



"Daring Daring."

hundred animals tumbled into the opening all in a heap. Others fell in on top of them and sank out of

sight in a twinkling. By this time the rotten ice was breaking under the still advancing herd. The trappers say that in less than a minute the whole body of buffaloes had been precipitated into the river. They were wedged in so thickly that they could do nothing but struggle for a second and then disappear beneath the cakes of ice of the swift current. Not a beast in all that mighty herd tried to escape, but in a solid phalanx they marched to their fatal bath in the "Big Muddy." In a minute from the time the first ice broke not a buffalo's head or tail was to be seen.

Possibly occurrences of this sort, in ancient tertiary times, helped to form the remarkable deposits of bones found in the old



"No Punch."

lake beds of the great West and else where. In these deposits the earth is literally crowded with bones, sometimes chiefly of one type, sometimes comprising many distinct species. In the latter case the victims were probably swept away by sudden floods, their remains mingling confusedly in quiet basins.—Scientific American.

WE KNOW of nothing more fatal to the accomplishment of any thing in an intellectual way than the idea that many persons get,



"The Coquette."

that they must defer study till some period in life when they shall have no interruptions. They allow ten minutes here and half an hour there to run to waste, because it seems hardly worth while to attempt study for so short a time. We have known persons, by availing themselves of a few minutes' time each day, gain, during a year, an extensive acquaintance with some particular branch of study; while others, who would not economize the minutes had scarcely a useful acquisition.—The Household.