who used the sweets to lure children into her clutches, so that she might bake and eat them. You know how she tried to trap Hansel and Gretel and how the clever children escaped, and in the end baked the witch in her own oven.

Some children I know made a toy scene and paper doll people with which to act part of this story. The stage for their toy theatre was a green-topped table and the woods which formed the background was drawn in crayon on a large piece of paper. Other trees stood about in front of this—trees made of small branches, with green paper leaves, standing in small spools painted brown.

In the midst of the woods, near the back, stood the witch's house, a remarkable little house, covered with real cake and candy pasted in small pieces all over the paste-board box which formed the foundation and hanging in gay festoons from the eaves of the pointed roof, made from the corner of another box. The house had a door and windows which opened, and a fence around it, against which were leaning half a dozen gingerbread boys and girls, who had been baked by the witch and placed there ready for future eating.

And there, in front of the sweet little house, stood Hansel and Gretel themselves, looking hungrily at the goodies before them. They did not notice the wooden cage at one side nor the old witch peeping out from one of the windows, and even if they had seen the big brick oven with the iron door, they would never have guessed in the beginning that it was used for baking children.

The figures were made of heavy paper, with the costumes drawn on them with crayon. Each figure had a small wooden block pasted on the back at the base, so that it would stand erect. The witch was dressed in black, with a pointed cap, and the children wore bright peasant costumes.

If drawing figures is too difficult, one can always trace them from a book, or get a good pattern by cutting out a figure from some fashion magazine.—New York Churchman.

INVENTIONS DUE TO BOYS

The late Captain Cody, the inventor of the aeroplane kite, who recently gave an exhibition at the Crystal Palace of his new man-lifting air machines, was considerably astonished when, on the morning of the trial, a couple of models of his invention came fluttering gaily over the grounds from outside. Subsequent investigation proved that the tiny duplicates had been built to scale by a couple of clever Penge youths, who had made mental notes of the principles upon which Captain Cody's originals were constructed, while on a previous visit to the Palace, some days previous. The boys had spent the whole of their pocket money in materials, had occupied their spare time in putting the kites together, and had utilized the spacious coal yard attached to the Penge railway station for conducting their preliminary experiments.

Sir John Brown, who made the first rolled armour plates for modern battleships, was but a lad of sixteen when the sight of a carriage worked by a spiral spring, at a village fair, suggested to him the conical spring buffer for railway tracks, out of which, after a long struggle, he ultimately made a fortune.

Eli Whitney, the inventor of the cotton gin, got the germ of his great idea from seeing, through the interstices of a hut, an old negro work a handsaw among the freshly-picked cotton stored within. The teeth of the saw tore the lint from the seed easily and quickly, and young Whitney (he was barely thirteen at the time), realized at once that a machine working a number of similar saws simultaneously, would revolutionize the cotton-growing industry. He said nothing to anybody, but set to work building models and experimenting. His difficulties were enormous, for he not only had to make his own wheels, cogs, etc., but had also first to forge his own tools and even to manufacture the paint wherewith to colour his many plans and drawings. But years afterwards, the first complete cotton gin ever constructed was built from those very models and plans, and with scarcely a single alteration.

At Attercliffe, near Sheffield, in 1760, there lived a watchmaker named Huntsman, whose temper had often been tried by the defective quality of the watch springs then in use. He sometimes wondered if it were not possible to make steel articles of like nature, and at last came to the conclusion that if he could only melt a piece of steel and cast it into an ingot, its composition would be the same throughout. He experimented, and at last succeeded. The supply created the demand. And ere long Huntsman was turning out cast-steel ingots by the hundred tons, and reaping a fortune. The workmen in the mills were paid very high wages, and were sworn to secrecy. One bitter night they gave shelter to a wan, half-frozen lad, dressed in tattered corduroys. He asked no questions. Indeed, he seemed dozing most of the time in the warm glow of the furnaces. Nevertheless, when he went, he took the secret of steel casting with him, and before long many mill owners in Sheffield were working the new process. Not a very honourable way of gaining the secret, we admit, but it was a boy's mind that was selected to secure it.

Samuel Crompton, a boy of sixteen, copied the best features of the spinning machine invented by Hargreaves and Arkwright, added to them some of his own, and, after thirty months of anxious and secret experimenting, produced the first spinning mule—so-called because it was a kind of hybrid between Hargreave's jenny and Arkwright's water-frame. The raw apprentice was no match in cunning for the cotton lords, who soon found out the secret of his new machine, and shamelessly robbed him of the fruits of his ingenuity. These dishonest things one reads of occasionally, and they made one sorry to think that human nature is of such a kind that it is sometimes willing to cheat even the young.

The late Sir Isaac Holden's inventions in connection with the wool-combing industry have almost obscured from the public's remembrance the fact that he was also the originator of the lucifer match. This happened while filling the position of lecturer on chemistry at the Castle Street Academy, Reading. He used to rise at four in the morning, in order to pursue his studies, and found the old-fashioned flint and steel extremely inconvenient. So one day, he made a paste of phosphorous and other substances, stuck it on the end of a sliver of wood, and found it would ignite on being rubbed against any rough substance. Holden himself did not realize the importance of his discovery. Not so, however, with a pupil of his, to whom he showed it. This youngster, who chanced to be the son of a London manufacturing chemist, at once wrote to his father about it, and shortly after lucifer matches were issued.

Lord Armstrong, as a boy, was intended for the law. but as it happened, there was a water wheel of curious construction near the office where he worked, and the man who owned it explained its mechanism to the inquisitive lad. He also explained to him an idea he had for utilizing the power of falling water, in order to lift great weights. A few brief words set young Armstrong thinking. A little later he started experimenting. And the result of it all was that there was perfected, in due course of time, the enormously-powerful hydraulic crane, which has rendered possible the ambitious enterprises of the modern builder.

Last, and most wonderful of all, comes the case of the little Italian lad Guglielmo Marconi, who, through seeing a conjurer perform certain tricks by means of electrical agency, was enabled not so very long afterwards to astonish the world with wireless telegraphy. His first experiments were carried on in a field on his father's farm, and his apparatus consisted merely of tin biscuit boxes set up on poles of varying heights, one of which was connected with a crude transmitter and the other with an equally crude receiver, both of his own manufacture. This was in 1886, when he was in his fourteenth year, and he was barely twenty-one, a modest, beardless lad, when he was in London explaining to the greatest scientists of the age the greatest discovery of the century.—The American Boy.