FERRULE
PLUGS.

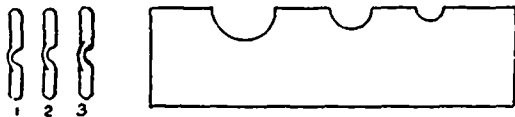
seat, and finish with the invisible fastening. If you use a fine quality of drab-linen line for this purpose, you can add to the beauty of the "grasp" very greatly by winding some of your scarlet silk between the turns of the heavy cord.

Now come to the first ring. Wax your spool of silk lightly throughout with bee's-wax, and re-wind on to another empty one; then, having with a file beveled the end of the keeper to the thinnest possible edge so as to permit the silk to wind more evenly and readily to place, fasten the keeper temporarily in position by a turn or two of thread round the half of it further away from the end at which you begin to wind. Start the winding a few turns distant from the keeper, and wind the silk evenly and closely around rod and keeper up to where it arches to fit the ring, taking care not to overlap, then undo your temporary fastening, bend up the keeper, and continue the winding round the rod *under* the arch of the keeper. When you have covered the short distance occupied by the arch of the keeper, insert the ring in place and continue the winding around the other half of keeper and rod, and fasten at a few turns beyond the end of the keeper.



Do not attempt to wind the silk with one hand round and round the rod held in the other, but, having started the winding properly, hold the silk in one hand and twist the joint round with the other, so as to draw the silk through the fingers which guide the coils to their place on the revolving rod.

Continue the winding in the same way with each ring down to the ring top of the tip, which you will now cement in position to receive the line from the continuous straight row of rings you have so carefully fastened on. Now burnish your windings with some polishing tool—an old tooth-brush handle is as good as you can use—to remove any unevenness and produce a smooth surface, then give a *thin* coat of varnish, being careful not to daub the rings, and with a pointed stick



insert a drop of varnish under the keeper. Apply several coats to hand-grasp and windings, after giving plenty of time for each to dry, until you have a number of smooth polished bands around the rod, which, when hard and dry, will be as firm and binding as metal circlets.

With the exception of a grooved wood form fitted to the size of the joints (which you can either make yourself from a piece of soft wood the length of the joints, and one and three-quarter inches in diameter, or buy for a small sum, with a cotton case to slip it into), *your rod is now finished!* and my word for it, if you are what I take you to be, the enhanced pleasure you will get out of it will more than repay for all the trouble, and you will esteem it at a greater value than one costing many times as much if bought in a shop.



THE FINISHED ROD.

NATURAL HISTORY FOR THE LITTLE ONES.

ADAPTED FROM JULIA MCNAIR WRIGHT.

MR. AND MRS. SPIDER.

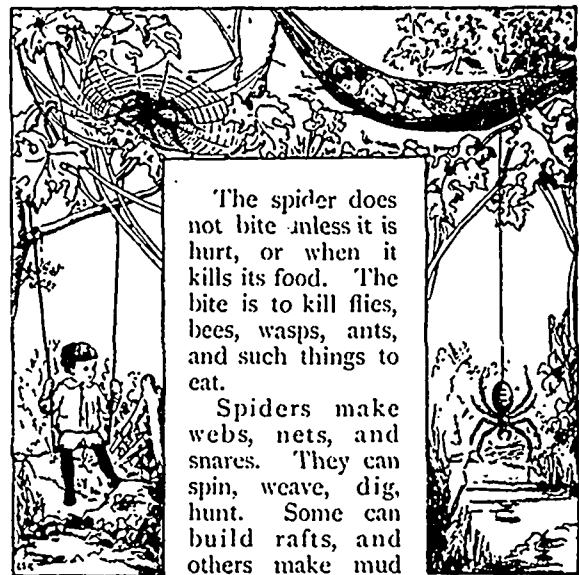
The spider lays eggs. Out of the eggs come little spiders. They grow to be big ones. The body of the insect is soft and hard, and is made in rings. Its skin is tough; it changes its skin often when it is very young.

The spider has eight legs instead of six, and most spiders have eight eyes. The spider's body is in two parts. The front part is not so large as the hind part. The spider can walk up a wall. The brush on his feet will not let him drop off. He uses his legs to jump and to walk, and to guide his thread when he spins.

Spiders spin webs. The hind part of the spider is large and round. It has six small, round tubes. In the tubes is a kind of glue. When it is drawn out into the air, it gets hard. It is then a fine silk, and as it comes out it is woven into a net which we call a web.

Spiders are of all colours. Their dress is like velvet. It is black, brown, red, and gold. It is in stripes and spots. The spider is like a king in his rich dress. The eight eyes of the spider cannot move. They are set so that they can see every way at once.

While the spider is growing, he pulls off his dress. His skin is hard and tough, and before the baby spiders are two months old, they shed their coats three or four times. They spin a bit of line to take firm hold of. Then the skin on the front part of the body first cracks open; then after this the skin on the hind part falls off; and by hard kicks they get their legs free.



The spider does not bite unless it is hurt, or when it kills its food. The bite is to kill flies, bees, wasps, ants, and such things to eat.

Spiders make webs, nets, and snares. They can spin, weave, dig, hunt. Some can build rafts, and others make mud houses. The nests

are for baby spiders. The snares are to catch food. The silk of the web is very fine, but it is very strong. It will hold up a big, fat spider. It will hold fast a wasp or a bee. Do you see the spider on his thread? It is his swing. He can swing as the boy does in his rope swing. Do you see the spider lie at rest in his web? Do you see the child rest in a web made of string?

How does the spider make his web? First he finds a good place. Then he presses the end of the tube he spins with, and makes a drop of glue fast to a wall, or leaf, or stem. Then he drops away; and as he goes,