

is applied to the puncture in such a way that the sticky surfaces are in apposition; gentle pressure is now made, beginning at the centre of the patch and finishing at the edges, so as to expel all air and get the patch firmly adherent throughout: a little French chalk (supplied in your repair outfit) dusted over the patch so as to cover also any rubber solution at the edge completes the treatment of the inner tube.

The next manoeuvre is that of replacing the component parts of the tyre, and until this is done our anxieties are not by any means ended, for a little carelessness even now may cause all the trouble over again. The inner tube should be thoroughly dried, and the valve-stem, devoid of all nuts, passed through the hole for it in the rim, the screw ring which holds it in should be lightly screwed on, and the tube laid in the bed of the rim all the way round; next the outer cover is to be replaced by pressing the edge well down into the bed of the rim commencing opposite and finishing at the valve, which should be pushed up slightly as the last loop of outer cover is replaced.

The valve must now be put together again as before, and the tube very slightly pumped up; search should now be made all round the edge of the outer cover in order to make sure that no portion of the inner tube has been pinched

between it and the rim, and if any part should be found caught in this way it should be gently pressed and eased until it has disappeared. Now pump away as hard as you can, for there is no doubt that the harder the tyre is now pumped the firmer the patch is made to adhere.

What a long time all this has taken to tell! Yet there is not one little fact that can safely be ignored and forgotten; one can do it all in very much less time than it takes to tell, but she will be an exceptional and fortunate girl who mends her first puncture without a mistake: so much is this the case that it is not a bad plan to make one's first attempt at home on some old tyre. Once having mastered the secrets of the pneumatic tyre, you have an inkling of the treatment of by far the larger proportion of bicycle ailments, for the modern bicycle's tyre is its weakest and most vulnerable part, and most of the hindrances to riding can be traced to it.

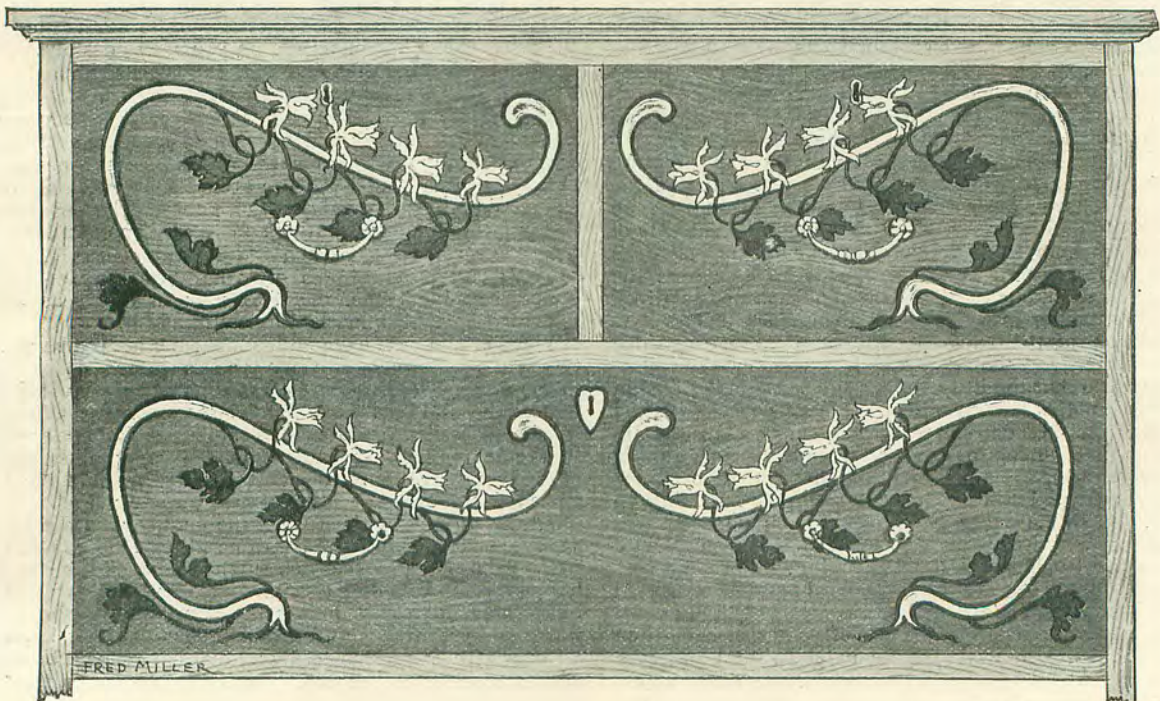
The inspection of the tyres having been made and completed, any slack tyre having been blown up, our girls will start for their ride possibly in happy unconsciousness that there is anything else of a preventive nature to be done. In my next article we shall see how they fare, how they might have avoided mishaps, and these having happened, how to correct the faults and mend the wounds of their stricken steeds.

## STAINED POKER-WORK.

A HINT FROM THE PARIS SALON.

I SAW the cabinet from which I took the idea embodied in the sketch in the Salon of 1900, which is to Paris what our Academy is to London. The wood was stained in greens and yellows, blending one into the other, and producing a rich, varied, and harmonious effect. On any white wood, such as pine, it would not be difficult to blend two or more stains on the same panel, provided, of course, that they were colours that assimilated. It would not do to try to blend opposing colours, such as red and green. Yellows and greens, on the other hand, break into each other and yield charming half-tones. There are many excellent liquid stains sold which could be used. They should be simply

stains, and not mixed with varnish, as the work should be French-polished if a nice surface is to be secured. This would have to be done for you, as polishing is a tricky operation. Those who wish to do everything for themselves might purchase some copal varnish and mix up such oil tube colours as Prussian blue, raw sienna, burnt sienna, and terre-verte with varnish, and apply them to the wood, using a separate brush for each colour. These colours would yield a number of tones as they blended one with another. Of course, this staining would have to be done after the poker-work was finished, or you would cause the varnish to burn, which would spoil the work. As regards



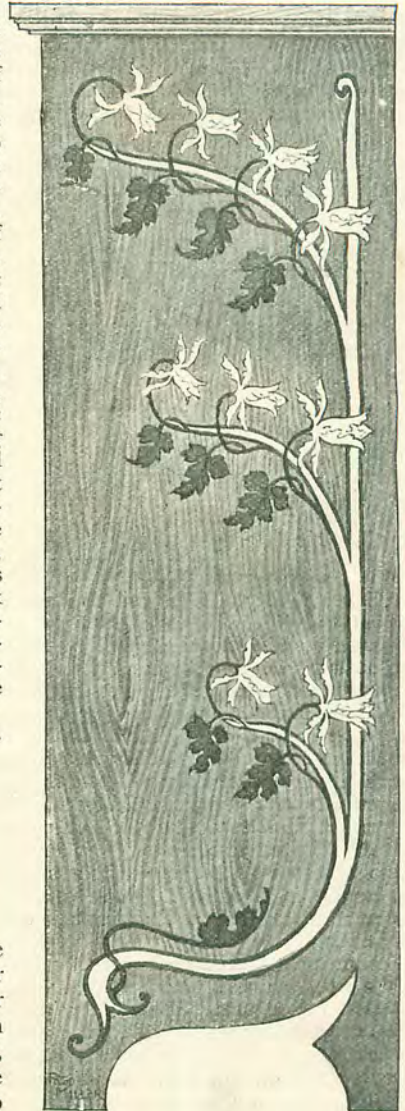
the poker-work itself the drawing shows how a chest of drawers might be treated, and as much of the effect depends upon repetition, it is of the utmost importance that the design should be symmetrical. One side of the design must therefore be drawn out the size it has to be produced, and then transferred to the wood. Carbon paper will do well for this purpose. By the use of a *pyrograph* much better work can be produced than is possible with an ordinary poker, and I strongly advise those of my readers who think of taking up this work to go to the initial expense of one of the proper "pokers." A good one costs about ten shillings. Poker-work when well done is a really charming decorative art, and can be made to yield most excellent results, as those who have visited the exhibitions of the Home Arts Association, held every year at the Albert Hall, must acknowledge.

Poker-work on leather gives most excellent results, and on hard wood such as oak where carving might be employed, it can be used with great effect. Many who are deterred from taking up carving might try it therefore. The weakness of much poker-work one sees is that a too finicking style of design is attempted. Some people use it as though they were handling a pen. A certain boldness of effect seems to me necessary where any large surface is to be decorated. The main lines of the design should be effective, and should be the first consideration. In the example given the effect is largely obtained by the supporting lines, and these might be burnt a little deeper than the details springing from them. The flowers might be left light, or stained with gamboge, while the leaves can be rich in colour.

A quaint ingenious arrangement of lines should be thought out before any details are developed, for these latter do not present the difficulties that the former

do. Of course, suggestions can be taken from the stems and tendrils of plants; for instance, the nasturtium in the way the leaves wrap around the stem would give a designer many a hint. The tendrils, too, of the passion-flower, and the eccentric growth of the wild clematis, or traveller's joy, offer valuable suggestions. Don't copy nature, but try to *design* patterns, working out ideas suggested by a study of plant forms. Mere transcripts from nature are not so effective, nor are they as adapted for the work as decorative arrangements built upon natural suggestions such as are shown in sketch.

FRED MILLER.



## MARGARET HETHERTON.

### CHAPTER XVI.



THE next morning, true to his self-given promise, Leo went to Binsdorf. He found Gertrud in the drawing-room at the piano. She looked at him in cold surprise as he entered.

"You are early," she said, giving him her hand.

"Yes, Gertrud, I wanted to see you; I could not wait any longer," the wooer stammered.

"Indeed," she said, and waited.

Leo grew hot and cold. He looked out of the window for inspiration.

"Yes," Gertrud went on, as though in answer to some remark he had made, "it is a very fine day and we are having an excellent harvest. When the corn is all in, we shall pray for rain on account of the turnips."

"Gertrud! You are laughing at me!"

But Gertrud's face was quite serious. "Not at all," she said. Then she went on in the same even way. "You say you have come to see me, Leo, and you evidently have something on your mind which you wish to say. Would you mind saying it?"

Leo looked very humble as he said, "I came to tell you that I love you, Gertrud, and to ask you to be my wife."

"Thank you. There we have the matter in a nutshell. And Anna von Kowitz?"

"Oh, Gertrud, why do you torture me? You know I meant nothing, it was mere play; she is a silly *Backfisch*;

it is only you I care about, or have ever cared about, ever since we were both quite little things, and besides," he said, forgetting to be gentlemanly in his anxiety to clear himself from blame, "Oskar König—"

Gertrud held up her hand imperiously.

"When I encourage Oskar König *after* betrothal," she said disdainfully, "it will be soon enough for my future husband to reprehend me; *before* betrothal I am my own mistress. It is not the same for you. Who do you think would be the greater loser should our marriage never come off?" Leo shivered.

"Do not let us play romances, Leo," Gertrud went on calmly; "we both know quite well that Uncle Franz and my mother have decided we should marry, and I, for my part, think the decision in all respects wise."

"Does that mean 'yes,' Gertrud?" the wooer asked, and then as she repeated the affirmative, he went on: "Don't you think we ought to give each other a kiss or something of that sort?" He had a feeling that the *Verlobung* had been a rather severer and more cheerless ordeal than he had expected it to be, and woefully lacking in romance.

Gertrud laughed, not unkindly, but just a trifle disdainfully. She held out her long, slim white hand.

"How dreadfully *bourgeois* you are, Leo!" she exclaimed. "Do you know," she continued, as her betrothed touched her fingers with his lips, "do you

## MISCELLANEOUS.

**HEADGEAR and BOB.**—Ordinary white straw hats may be cleaned with a little soap and water, with a few drops of ammonia in it, using a soft toothbrush. Chip had better be left at a maker's, or at a shop for their sale, where the cleaning may be undertaken.

**SPANISH GIRL (Teneriffe).**—We have given a recipe for "Chocolate Caramels" to B. A. (p. 448); perhaps you would like "cocoanut cream candy." Take three cupfuls of white sugar, half a cupful of water, half a teaspoonful of cream of tartar. Boil for ten minutes, then add one cupful of desiccated (or grated) fresh cocoanut, and beat well together, and then drop on white paper by the spoonful. We think that walnuts might be used instead of peanuts, thus. Take two cupfuls of sugar, two and a half cupfuls of New Orleans (or other) molasses, and one cupful of water, and a piece of butter the size of an egg. Boil until hardened in the water, then add one and a half teaspoonfuls of soda while on the stove, and three quarts of roasted peanuts cut in half. A nice fruit candy may be made with chopped figs and raisins, dried cherries, or other fruit dropped into a syrup made of the juice of two lemons and two pounds of sugar stewed together.

**KATHLEEN.**—Farthings were ancient English coins, and were instituted by King John in silver. If you have an Irish one of his reign, 1210, it is rare. Henry VIII. also coined them in silver, and the first issued in copper was by Charles II. in 1665 and 1672. There were half-farthings in 1343—Queen Anne's farthings—a few of special dates fetch high prices. One issue, representing Peace on a Car, is rare and valuable. Others fetch from £1 up to £4 15s. Gold ones of Charles II. are worth from £3 15s. to £6 6s. You had better get a *Manual of English, Scotch, and Irish Coins*, published at 170, Strand, W.C.

**E. W.**—The flower you ask about on page 459 is the *scabious*, or pin-cushion flower, from the resemblance of the flower-heads to that useful article.

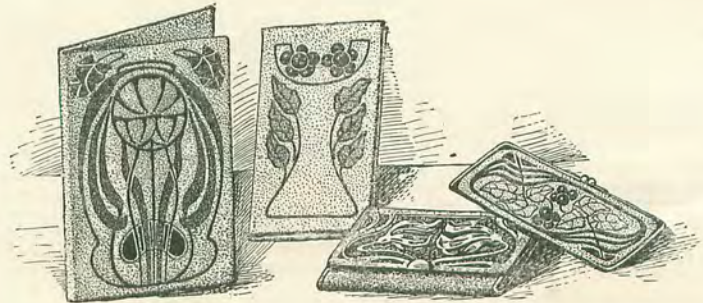
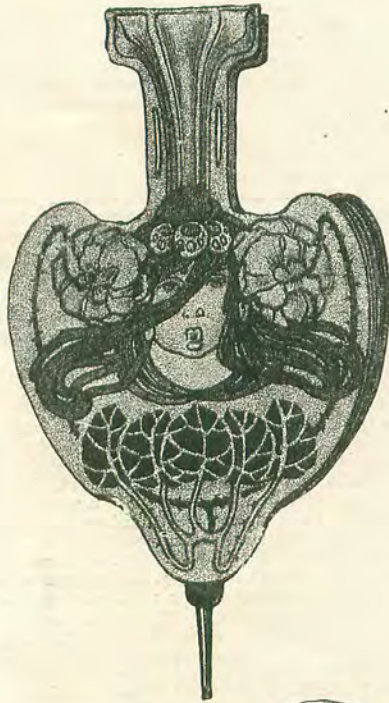
**A. G.**—We do not know the publishers of Gerard's *Herbal*; it is a very old book, about 300 years old, and probably not in print. You might consult it at any good reference library.

**E. M. L.**—The author of *The Star-Spangled Banner* was Francis Scott Key. A monument was erected to him at a cost of 150,000 dollars, bequeathed by Mr. James Sick, San Francisco.

**JEMIMA.**—To reduce almonds to a paste you have only to chop them finely, after blanching; sprinkle a little sugar under them on a paste-board, or marble slab without sugar, and roll with a rolling-pin. You can make cochineal-colouring with two teaspoonfuls of pulverised cochineal, one teaspoonful of alum, and one of cream of tartar. Mix in one cupful of hot water; bottle and cork. But you can buy colouring of any colour at any Italian warehouse for fancy groceries.

**HILDRES.**—To make "coffee cake," the ingredients required are these. One cupful of strong cold coffee, one cupful of molasses, one cupful of sugar, one cupful of butter, one cupful of chopped raisins (stoned), one teaspoonful of soda, one teaspoonful each of cinnamon, nutmeg, and cloves; and five cupfuls of flour. We fear that this is not the description of cake you require; but it is the only recipe we have.

**KATE JENKINS (Edinburgh).**—We regret that your letter should have so late a reply. We can recommend the Central School of Arts and Crafts, 316, Regent Street, W. The curator is Mr. C. W. Beckett. The school is open daily (Saturday excepted), and classes are also held in the evenings only, from 7 P.M. The fee for all the classes is 2s. 6d. a month. Several scholarships are awarded. There is also the Home Arts and Industries Association, Royal Albert Hall, S.W., for teaching every handicraft. Awards are given, and the work exhibited may be sold. For all information write to the Secretary.



SOME NEW DESIGNS

FOR

POKER-WORK.

