

KNITTING AND CROCHET.

For a glossary of terms, and saying "I never have found yet by asking what it is to 'purl.' Nobody knows, yet it is very common in directions for knitting. I always say as done in a stocking:—"Purl and knit, and so on, until the same is done. In stocking work the purl stitch forms the seam—hence the name seam stitch; but in fancy patterns the purl stitch does not form a seam, and so it is not called seam stitch. But in the same stitch under two different names, and is worked, of course, by bringing the thread forward and putting in the needle through the loop from right to left.

Materials.—White Andalusian wool, Needles—No. 10. Cast on 27 stitches, knit one row plain, knit 1 row, knit 11 rows. Increasing on the 3d stitch of every row. There should now be 38 stitches on the needle. Purl 1 row, knit 11 rows, decreasing by knitting 2d and 3d stitches together in every row. There should now be 27 stitches. Purl 1 row, increasing on the 3d stitch; cast on 10 stitches for heel. There should now be 38 stitches. Knit 9 rows, purl 1 row and knit 5 rows, increasing at the toe end only. There will now be 45 stitches. Knit 25 stitches, leaving 20 stitches on another needle, and knit backward and forward for front of foot as follows: 1st row, knit 25—2d row, purl 25—3d row, knit 1, 2 together 12 times. 4th row, knit 1, take up 1, same to end. These 4 rows form the pattern, and must be repeated 4 times more, making in all 20 rows for front of foot; make 20 stitches for side of foot. Knit 5 rows, purl 1 row, knit 7 rows, decreasing at the toe end only, cast off.

For leg.—Take up the 29 stitches on the side knitting, also 11 for front, then knit the 20 left on spare needle, knit 1 row, purl 1 row, 1 row of holes by putting wool twice round needle and knitting 2 together, purl 1 row, then 5 patterns same as front of foot—21st row, knit 3, purl 3, knit 3 to end of row—22d and 23d like 21st—24th row, purl 3, knit 3, purl 3, knit 3 to end—25th and 26th like 24th—27th, 28th and 29th like 21st—30th row, plain. Repeat as 30th 5 times more. Cast off on wrong side.

KNITTED LACE. The pattern represented above looks best when worked in fine materials with correspondingly fine needles. Cast on 8 stitches and work back plain. First row: Over, narrow (or knit 2 together) 3 plain, over, narrow, 1 plain. (The "over" is made at the beginning of a row by simply placing the right needle under the thread.) Second row: Slip 1, 2 plain, over, narrow, 1 plain, over, 2 plain. Third row: Over, narrow, 4 plain, over, narrow, 1 plain. Fourth row: Slip 1, 2 plain, over, narrow, 2 plain, over, 2 plain. Fifth row: Over, narrow, 2 plain, over, narrow, 1 plain, over, narrow, 1 plain. Sixth row: Slip 1, 2 plain, over, narrow, in next loop, which is the "over" of the previous row, knit 1 and purl 1, that is, after drawing the thread through in knitting 1 and before slipping the loop off the left needle, bring the thread forward and purl or seam a stitch in the same loop. Then slip it off, and finish the row thus—narrow, over, 2 plain. Seventh row: Over, narrow, 6 plain, over, narrow, 1 plain. Eighth row: Slip 1, 2 plain, over, narrow, 2 plain, over, 1 plain, over, narrow, 1 plain. Ninth row: Over, narrow, 2 plain, in next loop knit 1 and purl 1 (as in sixth row), narrow, 2 plain, over, narrow, 1 plain. Tenth row: Slip 1, 2 plain, over, narrow, 2 plain, narrow, over, narrow, 1 plain. Eleventh row: Over, narrow, 1 plain, narrow, over, narrow, 1 plain, over, narrow, 1 plain. Twelfth row: Slip 1, 2 plain, over, narrow, in next loop knit 1 and purl 1, then 1 plain, over, narrow, 1 plain. Thirteenth row: Over, narrow, 1 plain, narrow twice, 1 plain, over, narrow, 1 plain. Fourteenth row: Slip 1, 2 plain, over, narrow, 1 plain, over, narrow, 1 plain. Fifteenth row: Over, narrow, 1 plain, narrow 1 plain, over, narrow, 1 plain. Sixteenth row: Slip 1, 2 plain, over, narrow, over, 1 plain. Repeat from first row. The slip stitch should be done as in purling. Place the needle under the thread, slip the stitch and put the thread back ready for the knitted stitches.

THE SCRAP-BAG. A PLEASANT READER.—Mrs. F. Bratten, Kansas, writes: "I think the knitting patterns are both useful and pretty. I am now knitting the narrow scarf distributed by 'Hans-keeper,' and find them indeed, as you say, charming." SHELL STITCH.—C. P. Leland asks if some one will give directions for shell stitch, not shell pattern, used in knitting babies' gowns. LAMP PAT.—Mrs. S. T. B. sends three directions for making a pat.—one ounce each. Double each shade separately, four double. Thread a worsted needle with some of the zephyr, loop around and the knots about one-half inch apart, but between each knot leave the thread you wish. Then cut in strips about ten inches long. Double and sew in centre. It resembles moss.

THE ANTI-PHAGES OF GREAT PEOPLE. Being through an affliction much confined to my house, I take delight in being surrounded by domestic pets, and have been amused by the following thought: The whims and affections of my acquaintance. Some start and are all at ease while my master (who is as gentle as a lamb) and my pet (who is as fierce as a lion) are both in the room. It is amusing to see the same thing start and be all at ease while my master (who is as gentle as a lamb) and my pet (who is as fierce as a lion) are both in the room. It is amusing to see the same thing start and be all at ease while my master (who is as gentle as a lamb) and my pet (who is as fierce as a lion) are both in the room.

CONVERSATION BETWEEN A MARRIED COUPLE. "Take me to the opera to-night, won't you?" "I rather not, sweet." "But why not, darling?" "Because I can't afford it, precious." "It costs too much, Mrs. Sauter." "Costs too much? Why the Browns and Joneses go ever so many times to the opera, and you don't go?" "Costs too much to you, woman!" "You needn't be so common when you can help it." "I don't mean that, ma'am. If you won't take me, I'll go alone." "Then they would they could call another nothing worse, so they dropped the subject.—Daisy.

SCIENCE FOR THE PEOPLE.

TRANSPORTING FRESH MEAT. The Vienna method of sending fresh mutton and beef to London and Paris markets appears to have met with considerable success. Attached to the slaughter-house is a cooling room with well-fitting double doors, and as much as possible protected against external influences of temperature. A large fan, driven by a steam engine blowing-engine 1.5m. in diam., which sucks the air from the roof of the room, and then forces it through a tube 35 ctm. wide behind the ice-chamber at the opposite end of the room. This is a large ice-chamber, filled from without, in which the air to be cooled comes directly into contact with ice. Before the floor is quite stiffened, it is treated with chemically pure borax. This is applied to the meat, in the form of fine powder, by means of a bellows similar to that used in France for the sterilization of vine-stocks. It is pumped through a funnel into the bellows, the filling hole is stopped, and the substance is then blown out through the dust-producing apparatus introduced at the point. The quantity of borax used is so small that it is presently dissolved by the moisture on the surface of the meat. It is, therefore, not perceptible by the eye, and, as, also, it does not in the least alter the aspect of the meat.

FASHIONS IN PARIS. A view of the toilettes made at a first-rate dressmaker, and of a bonnet of the latest fashion, reveals that the year 1880 is a leading year in the annals of fashion. There is every three or five years a leading year, for the fashion, which adheres to a general outline as long as rulers in the trade allow. It does not mean that because there are several different shades of the same color at the same time, that all have been consecrated by fashion, nor that because skirts are wide for three months and narrow too, that the fashion for skirts has widened and narrowed. The cause for varieties of the wardrobe may be attributed to a love for singularity; it may be due to the influence of the human mind, or to the influence of the human mind, or to the influence of the human mind.

A NOVEL LECTURE EXPERIMENT. According to the Journal of the Franklin Institute, Mr. Holman, the actuary of that association, has constructed a lantern in which the light is produced by a series of good quality zinc plates, which are placed in contact with a solution of sulphuric acid. The action of the zinc plates on the solution of sulphuric acid, when they are placed in contact with a solution of sulphuric acid, produces a current of electricity, which is used to produce light. This is a novel experiment, and it is one of the most interesting experiments that have been devised for the purpose of producing light.

ARTIFICIAL DIAMONDS. Dr. Sidney Marsden, another experimenter in the field of crystallizing carbon, has succeeded in producing artificial diamonds. He has done this by using a mixture of carbon and hydrogen, which is heated to a high temperature. The result is a diamond, which is identical in appearance and properties with a natural diamond. This is a great discovery, and it is one of the most important discoveries that have been made in the history of science.

DIAMETERS OF MARS. At the opposition of Mars in November, Professor C. A. Young, of Princeton, made a series of observations with the view of determining the diameter of the planet. He found that the diameter of Mars is 4,219 miles. This is a very important discovery, and it is one of the most important discoveries that have been made in the history of science.

ETCHING ON COPPER. M. Leon Vitta writes to The Photographic News: My attention has lately been drawn to a new process of etching on copper. It is a very simple process, and it is one of the most interesting processes that have been devised for the purpose of etching on copper. It is a very simple process, and it is one of the most interesting processes that have been devised for the purpose of etching on copper.

PRESERVING ORGANIC SUBSTANCES. The fluid invented by M. Wickersheimer, of the University of Berlin, for preparing and preserving animal and vegetable tissues has been purchased by the Prussian Minister of Instruction, who has published it in his official organ for the purpose of preparing it as follows: In 3,000 grammes of boiling water dissolve alum, 100 grammes; common salt, 25 grammes; saltpetre, 12 grammes; carbonate of potash, 60 grammes; arsenious acid, 10 grammes. After cooling add filtering, add to every 10 litres of the solution 4 litres of glycerine and 1 litre of methyl alcohol. The method of application differs according to the nature of the objects to be preserved.

ON THE BRINK.

Who mourns? Flow on, delicious breeze! Who mourns, though youth and health strength go by? Fresh leaves invest the vernal trees. Fresh air will down my latest sigh. What am I but a part of earth? Of earth's great whole that throbs so high? A tempest-freshened brow each morn' To meet pure beams and azure sky?

RELIGIOUS INTELLIGENCE. THE REFORMED ARMEAN CHURCH.—Archbishop Mizandeh, of Antab, Armenia, now in London, has given an account of the recent reformation in the Church of Asia Minor. Thirteen years ago, when American missionaries had been long at work in the country, he was chosen to combat the views of the strangers and was thus led to study the doctrines of reformed Christianity. He soon learned that his own church was full of error, and not wishing to join the non-conformists since they did not suit his views, he met with a copy of the English Prayer Book in Turkish, and saw it was the very system he wanted. Abandoning his ecclesiastical work, he began to teach, and in spite of the persecution which he encountered, he succeeded in drawing around him a congregation of some 300 persons, and a fund to build a church was obtained from the Sultan. Between £300 and £400 have been expended upon the edifice, this amount having been principally contributed by the late Bishop Goban and the late Rev. W. Newton, who through all his difficulties have been his firm friends. The work of building has been arrested, owing to the lack of funds, and the Archbishop has gone to England to ask for support, and, in learning the English language to be able to translate the English Book into the vernacular of his people. He desires further to get his church recognized as the Reformed Armean Church in order to escape persecution and unjust taxation.

SCOTCH HERESY, SO CALLED.—Certain members of the Free Church of Scotland are indefatigable in their pursuit of heresy, and will not halt before opposition. The recent case of Robertson Smith apparently has only added to their zeal. As a meeting of the Edinburgh Presbytery, a short time ago, when given an evocation to the Assembly asking the appointment of a commission to examine into the state of theological teaching in the colleges of the Free Church, and especially the writings of Dr. Davidson and Dr. Candlish; the former being accused of holding the same view of Deuteronomy as Professor Smith, and the latter of undermining the authority of the Bible. After a warm discussion, the meeting decided by a vote of 36 to 26, the result being greeted with significant applause from the students present. The agitation is not to end here, however. Later reports say that though these cases were quashed in both the Edinburgh and Glasgow Presbyteries, it is expected that the Glasgow Presbytery will be "found only too willing to raise them again and to bring them under the surveillance of the General Assembly, where the Highland roll may be powerful enough to turn the scale against the so-called heretics."

DEATH OF MR. RUSSELL.—Monsieur Russell, president of the Roman Catholic College at Maynooth, Ireland, and one of the most learned ecclesiastics in the Catholic world, has just died, with age, with all the virtues of a saint, and with the reputation of a scholar. He was born in 1812, and he died on the 26th of March, 1880. He was a man of great learning and of great piety. He was a man of great learning and of great piety. He was a man of great learning and of great piety.

THE MOROCCO JEWS.—The misfortunes of the African Jews are not limited to Morocco. In Tunis and Tripoli, as well they are subject to a heavy tax, and are in a state of great distress. In Tunis, they are exempt, while in the estimation of Muslims their social rank is even lower than that of the Franks. It is said that in Fez, Morocco, and other cities of Morocco, a deplorable and fierce persecution exists for strong drink among the Jews. This is a very serious matter, and it is one of the most serious matters that have been reported in the history of the Jews.

THE RIGHT OF BELIEF IN SPAIN.—A Protestant minister undertook to bury a child in a Protestant cemetery, and serious trouble was occasioned by his doing so. The local priest objected to his doing so, on the ground that the child belonged by baptism to the Roman Church, and an appeal to the Governor was made. An appeal to the Minister of the Interior at Madrid, who replied by telegraph that "parents have the right to decide for themselves in what cemetery to bury their children. The child shall be buried." The chaplain to the child was sent to care for it, it is said, to keep out of the way, but the Governor ordered the Mayor to deliver up the body at once, whereupon the chaplain should open the receiving-casket and restore the body of the child to the parents, and also the rejoicing of the Protestant community.

MR. BRIGHT ON THE BIBLE IN SCHOOLS.—One of the candidates for election on the West-Bromwich school-board, Mr. B. Bright, has advocated what is known as the London Syllabus of religious instruction, recently asserted that John Bright, among other English Liberals, was in favor of giving religious instruction in the Board Schools. Somebody who is not Mr. Bright, however, has written and published a note in these words: "I must not take any part in your discussions or contests, but my opinion is that if you go beyond the old practice of reading the Bible in the schools, you will find yourselves in great difficulties, and will have to do anything to promote religion or peace."

THE TAXATION OF CHURCHES.

It is probable that the bill now before the Legislature will be passed, taxing all churches in the United States. This is a very important measure, and it is one of the most important measures that have been proposed in the history of the United States. It is a very important measure, and it is one of the most important measures that have been proposed in the history of the United States.

WHAT IS BUNYAN'S GLED WILL REMAIN. Men of intelligence, therefore, to whom life is not a theory but a stern fact, continued to sound with increasing necessity the note of warning that they may never again adopt the letter of Bunyan's creed, but continue to see in conscience an authoritative law. It is a duty, and it is a duty that is not to be neglected. It is a duty that is not to be neglected.

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