

## Textile Design

### FANCY PANTING.

3,120 threads in warp, 52 threads per inch, 13s reed, 4 in a reed, 50 picks per inch, 60 inches wide in loom, 54 inches finished width, 18 to 19 oz. finished weight

Warp—2-32s worsted, 12 threads black, 12 threads blue

Filling—18s skein black Angola.

Draft—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, repeat 1, 1, 12, 12, repeat five times more

### PEG PLAN.

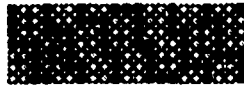


### WORSTED COATING—CORKSCREW

22s reed, 6 threads in a reed. Face warp, 5,808 threads. Back warp, 2,904 threads, 2-48s white worsted, 60 inches wide in loom; 56 inches finished width, 22 oz. piece dyed black

Filling—2-36s white worsted, 84 picks per inch

Draft—1, 8, 2, 3, 9, 4, 5, 10, 6, 7, 11, 1, 2, 12, 3, 4, 13, 5, 7, 14, 7.



—American Wool and Cotton Reporter

### CEMENT.

By melting carpenter's glue and adding commercial pitch a good cement is made for fastening cloth to iron

### FLAX—THE WAX IN IT.

Flax contains an appreciable but variable quantity of a substance of a fatty or waxy nature, the amount in the best kinds ranging from 0.5 to 2 per cent. In waste flax and flax dust it is present in large proportions—some 6 to 8 per cent. It can be extracted by using such solvents as ether, benzol, etc. Flax wax varies with the grade of flax from which it is obtained and may be yellowish yellow, yellowish green or brownish green. It has a rather unpleasant odor, which recalls that of flax itself. The melting point is 61.5 C. (142° F.), and the specific gravity at 60° F. is 0.9083. The presence of this wax has some influence on the suppleness of the fibre, the more there is, the less supply of flax. G. Hoffmeister has examined this wax, and finds it to consist of 61.32 per cent. of unsaponifiable waxy matter and 38.68 per cent. of saponifiable oil. Of the latter, 54.49 per cent. is free fatty acid and it contains 0.31 per cent. of insoluble fatty acids. The waxy matter has a melting point of 68° C. (155° F.), and is apparently a mixture of two or three bodies. The principal one is a hydrocarbon, in appearance like ceresin, while there are also present ceryl alcohol and phylosterin. An examination of the saponifiable portion shows that it contains small quantities of soluble fat acids, like caproic acid, stearic acid, palmitic acid, oleic acid, linolic acid, linolenic acid, and isolinolenic acid.

## COLOR AND DYES.

The particular coloring matters known as dyes are not only eminently endowed with the power of selective absorption in regard to light—a power which causes them to appear colored—but their particles or atoms possess a strong faculty for wandering into fibres and fabrics, and moreover, of becoming dissolved therein. This wandering power and solubility in solid materials, possessed to such a high degree by dyes, distinguish them sharply from ordinary colored substances. In the former case the particles travel into fibre and are actually soluble in it; in the latter case, although penetration proceeds, the actual solution of the color in the material is not affected. In short, a dyed fabric is nothing more than a solid solution of the dyestuff in the substance of a fibre.

The number of artificial coloring matters prepared since Perkin's discovery, now nearly fifty years ago, has been enormous. It is estimated that at the present day over 3,000,000 different individual dyestuffs are easily accessible to our industries, while at least 25,000 form the subject of patent specifications. The number of coloring matters furnished to natural agencies is comparatively small and those that do exist threaten soon to be ignored in favor of coal-tar derivatives. Perkin's great discovery has led to a complete revolution of the color output of the world and has placed at our disposal an infinite series of colors of every variety and shade.

—A woolen mill is to be established at Rapid City, Manitoba. Some years ago a mill was in operation at that place, but it was burned. A board of provisional directors has been selected by the company, consisting of J. G. Hindson, D. McNaught, J. A. Cowan, Thomas Houlding and H. C. Clay, all of Rapid City.

At the annual meeting of the Wholesale Dry Goods Section of the Toronto Board of Trade, the following officers were elected: J. W. Woods, chairman; H. J. Caulfield, vice-chairman, Paul Jarvis, secretary-treasurer; executive committee, Andrew Darling, Herbert Langlois, R. W. Pentecost, John K. Macdonald, C. B. Lowndes, E. J. Dignum, J. D. Ivey, J. D. Allan, and John Muldrew.

—Leather suits are worn for automobiling, as well as hunting, and for the latter the leather is colored for the purpose for which it is to be used. A pumpkin yellow for the rabbit shooting in pumpkin fields, a wild celery green or oxblood red for the season of autumn leaves. The coats are lined frequently with squirrel skin, and there are boots that lace up the sides, with leather trousers. All are oil-dressed and waterproof, and they do not harden with wear. One can get a hunting suit made especially for any purpose, from hunting alligators to shooting quail.

—A German paper gives the following formula for waterproofing leather: The skins are laid down at 107 deg. C. in a solution of one pint zinc-soap in one pint crude linseed oil, until it has got cold. Zinc-soap is prepared by stirring three pints zinc sulphate into the boiling solution of three pints in eight pints water, and purifying the zinc-soap, which separates out by remelting in boiling water. After scraping off the surplus of the zinc-soap dissolved in the linseed oil the leather is dried in the air and is then perfectly water proof, without having lost any of its pliability.