

seeing the greatly increased import duties proposed in the Customs Tariff Bill now before the French Chamber of Deputies to be levied on woollen manufactures imported into France from this country as compared with the duties under the Commercial Treaty of 1860, when special advantages to French products were accorded by this country, this Chamber is of opinion that the proposed new duties are not only very unfair towards this country, but are not warranted by the state of the woollen industry in France, and that it is desirable that representations be at once made by her Majesty's Government to the French Government with a view to a modification of the proposed duties being effected. That, in the event of a reduction on the existing conventional tariff rates not being obtainable, this Chamber urges upon her Majesty's Government the desirability of increasing the duties now levied on wines and spirits imported into this country from France. That this Chamber begs to call the attention of her Majesty's Government to the fact that out of a total export of manufactured articles to France of £8,238,225, woollen and worsted goods amount to £3,569,708, or 43 per cent. There was considerable discussion on the resolutions, but they were ultimately passed by 11 votes to five.

We would strongly deprecate any one concluding that the Bradford Chamber of Commerce has gone over to a belief in or an advocacy of the principles of protection. No such inference would be true. We ourselves have as firm a belief in the principles of free trade as we have in Christian ethics, yet, as all men can easily see both good principles and good laws are broken by bad men, and the latter would not command much respect were the power of the policeman not behind them. And so in a sense with the former; little regard will be paid to them, as is very evident, unless a corresponding power exists to compel it. This power is that of retaliation, and the adoption of other legislative means of protecting from such attacks our industry and commerce. We trust, therefore, that the subject will soon engage the serious attention of the Government.

The resolution of the Bradford Chamber has naturally given rise to a considerable amount of comment, and complacent local critics presume to condemn the retaliationists on the ground that they are reversing a policy which has been advocated by the Chamber for forty years—a very poor specimen of argument. The fact of the matter is, that as far as Bradford is concerned, if a poll of the electorate were taken today there would be an overwhelming majority in favour of retaliation. The question is no longer one of mere generalities with the Yorkshire folk. It is one in which their interest is quickened by the existence of the empty stomachs around them, and it is folly to attempt to argue that if the Government acted in accordance with the resolution, as passed by Sir Henry Mitchell and his friends, we should be the only sufferers. The only way to bring these obstinate foreign protectionists to their senses is to give them a dose of the medicine they are so fond of administering themselves.

PIEDMONTESE HEMP.

Hemp, the *Cannabis sativa* of commerce, is a well-known fibrous plant. In France it is termed *Chanvre*; in Germany, *Hanf*. It is an exogen and annual, of almost universal distribution, and growing to various heights according to the circumstances of its cultivation. In eastern countries it is grown largely for its yielding an intoxicating liquor. In Europe it is cultivated for the valuable fibre it produces. The seeds of the plant also afford oil. Amongst the best known hempes are those of Italy, which are highly prized amongst consumers of the fibre. Some interesting particulars of the cultivation of hemp in Italy have just been made public in a report of the French Consular agent in Bologna. He says that the Piedmontese hemp, which has always had a good reputation, is cultivated to the south-west of Carmagnola, on the banks of the Po, which at

this point separates the arrondissement of Pignerol, belonging to the province of Turin, from the arrondissement of Saluces, which belongs to that of Coni. The maximum product is 1,000 kilogrammes (2,200 lb.) per hectare (hectare = 2.47 acres) in the communes of Pancelieri, Vigone, Villafranca, Casalgrasso, and Polonghera. At the beginning of the present century the Piedmontese hems were the only ones exported from Italy, and it has been the custom to retain the name in trade ever since the Bologna hemp came into use. In Emilia the main cultivation of hemp extends to the east of the Panaro, between the Po and the Apennines, over the four provinces of Bologna, Ferrona, Ravenna, and Forli. The extent of this cultivation has never been accurately ascertained, but the Chamber of Commerce of Bologna has estimated that in that province alone the hemp harvest amounted in 1879 to 138,806 quintals, and in 1880 to 163,730 quintals. No returns have been published since, except for 1889, when the estimate was 126,063 quintals. The product of the province of Ferrara is about half as much again. Twenty years ago the Neapolitan farmers adopted hemp to take the place of madder. At the present time, the provinces of Naples and Caserta produce about 200,000 quintals. The total product, therefore, of the nine provinces of Italy which are engaged in this cultivation, with the addition of Sicily, may be estimated at 850,000 quintals annually. The export was never more than 600,000 quintals, and is now reduced to about 400,000 quintals. In the two regions of the Po, hemp is grown in biennial rotation with cereals. The hemp fields there are established on alluvial soil, which is rich, deep, light, and fresh. The hemp fields of Naples are more exposed to drought; and in them the soil is prepared with the spade, instead of, as in Piedmont, with the plough; it is gone over twice, the first time very deeply. In Naples several manures are used: dung from the stable, sweepings from the city, leguminous plants, and specially the lupin, either green, or in the droppings of sheep; in Piedmont no manure is used but from the stable. In Piedmont, in March, about a hectolitre of hemp seed is sown at random over each hectare. The young plants are thinned out, and two successive weeding take place. In the Bologna district, not more than 70 are sown to the hectare, and the seed from the same soil is used, refreshed occasionally with seed from the Carmagnola. In the Naples district nothing is used but Bologna seed, which is renewed every year, experience having shown that a rapid degeneration takes place in the seed obtained on the spot. In Piedmont the hemp grows to a height of four metres; in Bologna, five metres and over, with less thickness at the base. In Naples it rarely exceeds two metres. In the latter district the growth of the hemp is protected by trees and vines, which separate the fields in the old Campanian manner, and are commonly trained to follow the movement of the sun. The process of soaking is usually performed in Piedmont in retting pools fed by running water. In the Bologna district the retting pools are in still water, and stones are used to keep the hemp submerged. Around Ferrara stones are often wanting, and the lumps of earth which are used instead make the water muddy, and this injures the quality of the product. In Romagna there are no retting pools, and the watercourses are used, to the detriment of their purity. In Bologna the mud of the retting pool is considered to be a good manure to cover plants fit for fodder with. In Naples all hems used to be taken to the lake of Agnano, the waters there giving them a beauty and a suppleness which made up for the expense of transport. The drying up of this lake gave a temporary check to the cultivation of the hemp, but now it is taken to the Lake of Acara, the sulphurous waters of which favour the bleaching more than the softening of the rind. There were at one time in the suburbs of Ferrara two steam factories for the preparation of hemp without soaking, but the produce of these factories was everywhere rejected, as it was found they were liable to subsequent fermentation, and at the present time no hemp is prepared except by soaking. The Bolognese hemp is reported as being the most beautiful in Italy. It is almost white, with a shade of grey. It is supple, soft, tenacious, brilliant, and easily divided. Its filaments are slightly curled, it is very elastic and not brittle. It weaves very well, especially when moistened. This type is produced all over the province of Bologna, especially towards Budrio, as well as at Faenza (province of Ravenna), at Casaria (province of Forli), and around San Cesario (province of Modena). The hems of the province of Ferrara, those of Finah (province of Modena), those of Lugo and of Massalombarda (province of Ravenna) are ropemakers' hems. Returns show that the cultivation of hemp is especially remunerative in the Naples district, and it is extending there every year, while at Bologna it is stationary, and in Piedmont is diminishing.

Reviews of Books.

DIARY AND BUYERS' GUIDE. Manchester: HENRY BANNERMAN AND SONS, LIMITED, York-street.

This is the Annual issued by the well-known home-trade house of Henry Bannerman and Sons, Limited. The present one is, perhaps, the most excellent of the series, as might naturally be expected from the adoption of the suggestions accruing from experience.

Its contents consist of a brief yet well-written history of the house of Henry Bannerman and Sons, from its foundation to the present time, illustrated with portraits of the founder, his sons, and the leading men who have helped to give the firm its prominent position in manufacturing and commerce. Views of the mills, works, and warehouses are introduced, and also portraits of the directors, officials, heads of departments, and travellers employed by the house. As might naturally be expected, the whole forms an elegant commercial album of permanent interest. Messrs. Bannerman and Sons avail themselves of the opportunity afforded by the issue of this diary to impart instruction of a valuable character, by inserting therein essays upon various phases of the textile manufactures. The subject selected for treatment in the present issue is the manufacture of lace curtains, the matter being dealt with in a concise, well-written, popular little essay. A series of tables on income, wages, profits on sales, and kindred matters, make up the literary portion of the work, which is one of the best of its class that we have seen. This, however, is only what might naturally be expected, as it is chiefly the work of Mr. John Mortimer, the genial and pleasant chief cashier and head of the counting house, whose sketches as a descriptive writer upon country scenes around Manchester are so well known, and have been the source of pleasure to thousands of readers who have wanted to steal from their daily avocations in city mills and workshops and offices to the green fields and lanes beyond. By permission of Messrs. Bannerman we reprint in another column the history of their house.

GRANITE CLOTHES.—Our readers may remember being made acquainted, some months ago, with the wonderful production of threads from rock crystal by Professor Boys, and the no less amazing scientific purposes to which these filaments, so fine as hardly to be visible under a microscope, might be put. It seems that these threads will be as much at the service of sport as science, for if anglers can but handle what they will hardly be able to feel, fish will not be frightened by lines which they will certainly not be able to see, and yet will surely be caught by cords—if they can be called cords—which will bear a weight exceeding that of any fish that swims the seas. Mr. Andrew Lang, commenting upon this prospect, suggests that, if quartz can be made into gut, surely granite may become a textile fabric, and we may weave the Ross of Mull into coats and trousers. The colours of the granite in the Ross of Mull are excellently suited—how happy the term!—for these fabrics, and so man might be going about in garments of stone, and get their textile materials from the nearest quarry. When nature has provided asbestos, and gold, silver, and glass have been made into cloth, this would, after all, be nothing remarkable, but the difficulty of weaving invisible threads and of weaving impalpable fabrics will be likely to leave the Ross of Mull undisturbed for many generations yet to come.—*Ware-houseman.*

Designing.

NEW DESIGNS.

THE IMPORTATION OF FRENCH GOODS.

Filled as the commercial atmosphere at present is with tariffs and rumours of tariffs, retaliation, and such like, it may be well even for those not likely to be directly connected with such matters to consider calmly the real meaning of the measures alluded to. Speculators and those engaged in the export and import trade can only be relied on to give judgment as affecting the present; we must look elsewhere if we wish to obtain genuine insight into the why and the

wherefore of the measures that apparently threaten to overwhelm a great portion of our trade.

As a natural result of the stoppage of our exports to certain countries, an enquiry has been instituted concerning our imports, and during the past fortnight results have been presented to the public which are well worthy of attention.

The threatened French tariff has brought forth statistics which clearly shew the large hold that France has on our home markets. Sir Henry Mitchell, at a recent meeting of the Bradford Chamber of Commerce, fully demonstrated the fact that France exported to us very much more than we exported to her, particularly in the case of textile fabrics.

Now about 50 per cent. of such textiles are classed as silks, and we shall be much surprised if the other 50 per cent. does not consist of the more artistic woollens and worsteds, etc. Whether protection in the case of the United States or France will eventually be found to be serviceable no one can at present say; one firm goes out with its machinery, anticipating the continuance of such protection, another stops at home anticipating the re-adoption of something like free trade, and so for the present we must abide by the fact.

The facts stated above, however, do not depend on free trade or protection; they speak out and tell us that in artistic design we are

behind France, and the sooner we make amends the better for our home trade.

There is undoubtedly, as we have previously pointed out, room for great improvement in this direction; it does not seem that we lack so much in artistic design or in cloth construction, but rather in the combination of the two; we have our art designers, we have our cloth manufacturers; the designer makes a design and the manufacturer modifies it for applying to textiles, and probably spoils it. Against the extensive copying of French designs we cannot speak too strongly, and yet such copying only implies again that we have no textile designers, in other words no designers who truly realise the tone imparted to design by cloth construction. There is an old saying that the knowledge of a defect is half the cure; let us hope that this case will prove no exception to the rule.

FIGURED DRESS CLOTHS.

The type of figured textile demonstrated last week is capable of the widest application. Such designs applied to worsteds with a suitable choice of yarns and colourings will prove equally as effective as in the case of woollens. Of course fine effects cannot be produced on this system owing to the coarse sets required, but if the law that "the larger the surface and the more subdued the colouring and the smaller the surface and the more intense the colouring" be

observed, then a large variety of useful effects are capable of being produced.

In the case of cotton goods we should recommend the trial of a silk slubbing thread; silk waste has for a long period been used in a similar form in other cases and it would probably prove effective here.

Design A illustrates a method of showing up a small flush figure in a more effective manner than by simply letting it float on the ordinary ground. In this case plain has been used to surround the figure, and with the 3 and 1 or 2 and 2 will set fairly open, no difficulty would be experienced working this; but in the case of a close set, say where the 8 end sateen ground is employed, then a difficulty would be experienced in using this make, so similar effects possessing greater weaving capacity are resorted to. The twilled hopsack shown in Design B gives a suitable effect, or the double plain Design C on the 4 and 4 rib as contrasting with the sateen sometimes proves very effective.

Some exceedingly beautiful results may be obtained by the employment of the double plain in unison with colour for such surroundings, which shall claim our attention in future numbers.

TARTAN CHECKS AND STRIPES.

"The girl of the period" is in a quandary to know whether the reflection in the mirror is from her own form or the family portrait of her grandmother adorning the wall opposite. From the present fashion in dress, and the bitterly severe winter, we seem to have glided imperceptibly into the good or bad old times when George the Third was king, of which the country retains a curiously clinging remembrance. Everything which hails from north of the Tweed is very popular, especially so in the French capital. The coarse cheviot heather mixture Tweed cloth, with its peat-reek-soot dyes of dirty black and grey with green and yellow from the whin-bush blossoms is quite recherché; so are Kilmarnock bonnets and night-caps. The beautiful products of Galashiels, Dumfries, and Innerleithen looms are simply tolerated; tartan combinations of the most vivid and staring contrasts are exhibited in every conceivable form; articles of wearing apparel, as dressing gowns, socks, pyjamas, neckties, suspenders, stockings, corsets, shoe cloths, gaiters, vests, etc., are all in demand, and we may anticipate the same rush at home if the severe weather should continue.

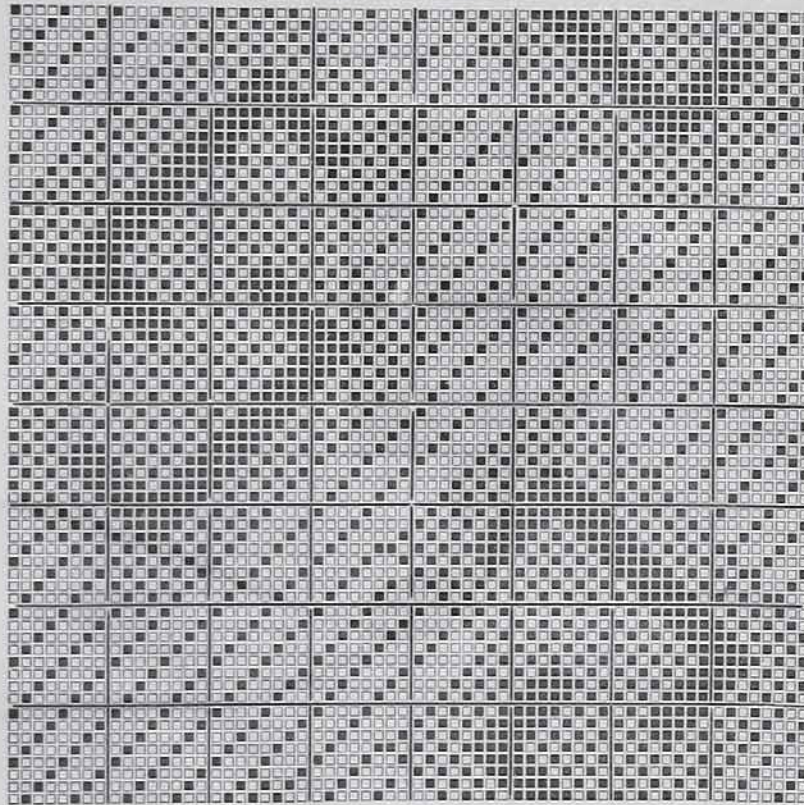
Our readers will find by referring to past issues of this journal full details of well-known Scotch tartan plaid patterns. We now give one or two more with different weaves (see pegging plans No. 1 and 2, with No. 2 draft, No. 1 having a straight-over draft): Reed 30, two in a dent, or 60 ends per inch, of 20's twist, and 60 picks per inch of 20's cotton weft and warp for the check patterns, and 40 picks per inch of 24's weft for the stripes.

No. 1.—Warp pattern of the Clan McNeil, 28 light blue, 28 black, 40 grass green, 8 black, 4 bright yellow, 4 white, 4 bright yellow, 8 black, 40 grass green, 28 light blue, total 192 stripe pattern; if for a check, weft pattern same as warp.

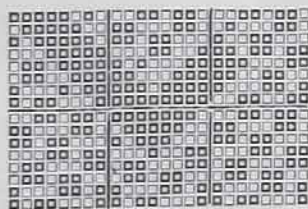
The Macintosh. No. 2.—Pattern for stripe: 4 black, 12 scarlet, 40 dark green, 12 scarlet, 20 royal blue, 72 scarlet, 20 royal blue, 12 scarlet, 40 dark green, 12 scarlet; total 224 ends. Check, weft pattern same as warp.

The Cameron. No. 3.—Pattern: 8 yellow, 8 blue, 8 red, 24 blue, 20 black, 20 green, 8 red, 4 green, 4 red, 16 green, 4 red, 4 green, 8 red, 20 green, 20 black, 24 blue, 8 red, 8 blue; total 216 ends. For stripes, check weft pattern same as warp.

The Gunn. No. 4.—Pattern stripe: 8 green, 36 deep blue, 8 green, 20 black, 40 green, 4 scarlet, 40 green, 20 black, 8 green, 36 deep blue; total 230 ends. For check, weft pattern same as warp, and to prevent mistakes let No. 1 pegging plan with straight-over draft be used for the checks, and No. 2 pegging plan and draft for the stripes in the four patterns given. By referring to our issue of June 28th under the heading of "Fancy cotton and silk tartan cloths," and the issues of August 30th, "Clan Tartans," it will be seen that we clearly stated the advent of these classes of goods for the winter season.

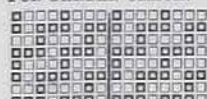


DESIGN A.



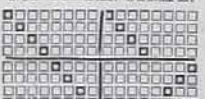
DESIGN B.

No. 1 PEGGING PLAN FOR TARTAN CHECK.



DESIGN C.

No. 2 PEGGING PLAN FOR TARTAN STRIPE.



DRAFT PLAN FOR No. 2.