

Double-Cloth Weaves having for their Arrangement One End Face to alternate with One End Back both in Warp and Filling—being united as one Fabric by Special Binder Warp threads.

Fig. 1 shows one of these Double-Cloth Weaves having for its Arrangement: One End Face (shown in ■ type) to Alternate with One End Back (shown in

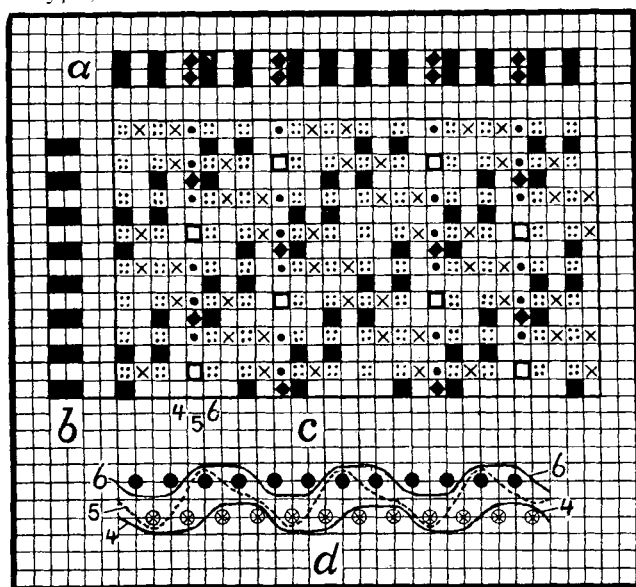
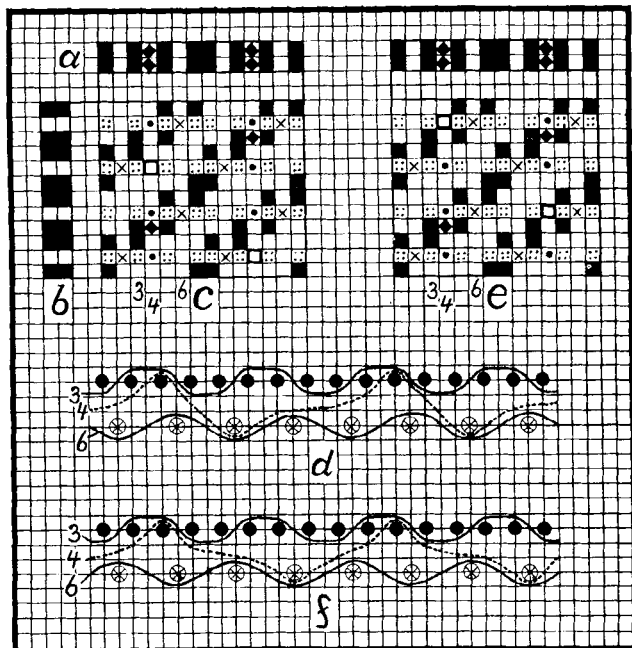


Fig. 1

□ type) in Warp and Filling, being united by a special Warpthread after every set of four warpthreads shown by * type to alternate with sets of eight warpthreads.

Fig. 2

Fig. 3



Repeat of Weave: 14 warpthreads × 8 picks.

Two repeats of the weave are given.

- a: shows the arrangement of three sets of warpthreads used.
- b: shows the arrangement of two sets of Filling.
- c: shows the plan of interlacing warp and filling.
- d: shows the interlacing of warpthreads 4, 5 and 6 with the filling picks; the face of the

fabric is shown by full black circles; the back of the fabric is shown by dotted circles.

Fig. 2 shows by:

- a: the arrangement of warpthreads used (Face by ■ type, Back by □ type, Binder by * type).
- b: the arrange of introducing the filling: 2 picks Face to alternate with 1 pick Back. Interlacing of warpthreads: 3-4 and 6 are shown in Diagram d.

Fig. 3 shows by a change of interlacing binder warpthreads 4 and 11.

- f: shows the interlacing of warpthreads 3-4 and 6.

The Chemical Industry

The great field of chemical industry presented, at the outset, perhaps the most difficult of the many problems which the Alien Property Custodian was expected to solve. It was, or had been until importations ceased, saturated through and through with German influence. In regard to no branch of human endeavor was the myth of German invincibility more firmly fixed in the public mind. The country was flooded with German chemists; and those who were not German by origin, were mostly German, directly or indirectly, by training. A vast proportion of the persons engaged in the business bore German names. Connections more or less close between American and German houses were frequent and obvious. There was unquestionably a considerable German interest in such manufacturing as was being carried on. In view of the well-known and uniform policy of the great German government-aided combinations to embark in foreign manufacture only when export from Germany was not feasible, this interest seemed unlikely to be large; but, unless it could be discovered and rooted out, no substantial Americanization of the industry was possible. The German chemical industry, which had so thoroughly penetrated and permeated our own, was gigantic, perhaps the strongest, and certainly the most remunerative of all Teutonic industries. The task of identifying and taking over its property in the United States was thus a direct attack upon a most formidable opponent; while the information on which the work had to be based, had to be derived, to an exceptional extent, from men hostile by birth or tradition.

In order to give a fair understanding of the situation, it is necessary to sketch briefly the history of the German chemical industry. From about the middle of the nineteenth century, the practical application of chemical science began to occupy the attention of a constantly increasing number of the best scientific and industrial minds of Germany. A combination of natural advantages and national characteristics led to rapid advance. The industrial district in which the necessary materials and other facilities were found or developed was exceptionally compact. Distances were short and transportation easy. Labor was cheap, docile and stable. On the other hand, the national habit of mind was peculiarly fitted for chemical research work, and particularly for the interminable tasks presented by such research, in the way of exhausting the immensely numerous possible combinations available within a particular field. From the first, scientific attainment, and particularly accomplishment in the field of research, appealed strongly to the public mind.