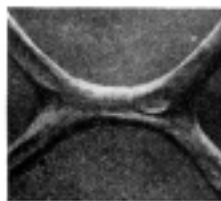


ARTIFICIAL SILK SEEN UNDER A MAGNIFYING GLASS.



WHERE THE SILK
THREADS UNITE.
They do not cross but
merge into one another.

MAN-MADE SILKS

THERE is now being manufactured in an artificial silk factory in the north of France gauze or tulle which has the remarkable brilliancy of synthetic silks. But by careful examination with a magnifying glass one can discern a singular peculiarity of the material: it is found to be composed of an even mass instead of elementary intersecting fibers. At each angle of the hexagonal meshes, the threads composing the sections are joined, forming a single thread, each one of the same size. It is very evident after such an examination that the product is indeed an artificial fabric.

The net work which forms the gauze is moulded by a metallic cylinder which is finely engrossed with intersecting lines. This roller turns parallel with the receiver which contains the cellulosic solution in such a way that the mould engraved on the surface becomes filled with the mixture, rollers and scrapers clean perfectly the cylindrical surface, so that the grooves alone retain the paste. The cylinder-mould meets afterward a sort of belt on the surface of which, under the influence of the pressure, a transfer of the tracing is produced. The net work of the cellulosic fibers is detached from the principal cylinder and adheres to the cloth. The phenomenon is, however, quite difficult to obtain, the nature of the receiving surface plays a certain role and the mesh or net work

must be carefully detached from the cylinder, as the gauze is extremely fragile. It is finally solidified by immersing in a coagulating bath. However satisfactory the results obtained may be, the utility of these fabrics is very limited and the usual processes of spinning and weaving are therefore not seriously menaced.

It would be practically impossible to imitate a closely woven fabric by this method.

The manufacture of artificial silks has developed rapidly and possibly artificial cloths may some time be successfully produced by means of solidifiable solutions without tissues. That day, however, is probably not close at hand.