

New Rayon Products

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New rayon products are found everywhere. Travellers, returning from Mediterranean and Round-the-World Cruises, bring back from the Orient native costumes made of rayon fabrics; from Europe they bring dresses, lingerie, and home furnishings using rayon materials and rayon trimmings. In America, one can see new rayon products decorating the office, the hotel, and the home; its use in outerwear and underwear is steadily increasing.

Developments in Yarns

Fundamental in any discussion of new rayon products are the new types of yarn which have been developed and added to the original coarse, stiff, shiny, loosely twisted product. Such developments are only possible with a manufactured yarn. There are new acetate-process and new nitro-process yarns. There are delustered and low luster yarns; there are unifilament and multifilament yarns; there are crepe twist yarns. There are rayon filaments of lower denier than those spun by the silk worm; there is a stiff, crimped rayon which looks like wool. There is staple rayon.

One of the newest products is a ribbon-like rayon called *Lamicel*. It somewhat resembles the *Visca* (used as a straw substitute). *Lamicel* is much thicker than *Visca*, for it seems to be made of two layers of tough cellophane with staple rayon held between them. The *Lamicel* can be piece dyed. *Lamicel* is shown made up into a dobby weave fabric using a spun silk filling and alternating the *Lamicel* warp with a fine spun silk yarn. (See Sample No. 1). The smoothness, stiffness, and luster of this fabric is reminiscent of the horsehair furniture covering of earlier days; the bright color in which it can be dyed and the toughness will serve to gain customer approval for sun room and porch furniture coverings.

Many of the new rayon products follow the lead of silk in style novelties and in staple fabrics. During the summer of 1930, rough weave silks were so much in demand that they say that the supply of douppions, which gave the rough effect, was used up. But rayon factories

can work at any speed and *Sase*, a staple rayon, was used to spin *Douppioni* filling. This, woven with a rayon (or silk) warp, produced an attractive looking substitute for the rough weave silks. A print fabric made of *Sase* is shown in Sample No. 4.

In all of the new rayon products the disadvantages of the first yarns are being decreased. Linings for men's coats are advertised as guaranteed to wear as long as the garment.

Sheets and Bed Spreads

Apparently one does not have to consider in some of the new rayon products that rayon is weak when wet. Consider sheets which must be washable and durable. *Crepe de chine* sheets led the luxury way and *Bemberg* followed with a firm close fabric which is both luxurious and practical. *Bemberg* sheets are made in white and pastel shades.

In the line of bedding, the use of rayon in bed spreads has become very common. There is a wide price range. As the price increases, a larger proportion of rayon is used; this is sometimes a disadvantage as rayon is slippery and poorly finished scallops will pull out. The best rayon bed spreads are closely woven and firm; they have a taffeta-like ground which gives much longer service than its silk model. Good rayon bed spreads have helped its prestige.

To anyone who has followed the growth of customer acceptance of rayon, the invention of transparent velvet marks a turning point. The change for the better in the point of view at that time is evidenced by the change in the slogan from "Rayon gives beauty and body at a lower cost than silk," to "Rayon is now being priced and styled so as to command respect." Apparently the desirable qualities of transparent velvet cannot be reproduced in an all-silk fabric, and chiffon velvet and Lyons velvet have not yet been able to displace the rayon pile fabric from its high place in fashion's favor. It is true that ready-to-wear buyers and piece-goods buyers, salespeople, and customers often were (and are) not informed of the

rayon content—but transparent velvet caught the eye and has held it.

This is an illustration of how the customer (as well as the merchandiser) has been induced to swallow the rayon pill. It has been sugar-coated by the style prestige given by such names as Bianchini, Rodier, Schiaparelli. Trade names too have helped to disguise the content and make a kind of “blindfold test,” so that prejudice against rayon was not a factor in the choice of the materials.

The men who are planning to extend the field of use for rayon are keenly watching for ways of turning silk's experience to their advantage. In the winter of 1930-31 when panne velvet is favored for a high style position, Celanese develops *Velvocol*, a 7-1 satin with a crepe twist wool filling yarn. It gives the effect of panne velvet and is to be used for wraps, coats, formal suits, hats, etc. It's a far cry from the Baronet Satin of 15 years ago.

“Prints” have helped to put over the various rayon crepes. Perhaps if printed rayons were not segregated with cotton goods, they would give their silk models even stronger competition. Many of the designs are most alluring. In the sheer crepes, *Svelda* (Galey & Lord) chiffon (Bemberg) uses the loveliest designs. *Svelda*, in crepe de chine weight, uses the popular and practical tweed prints for Fall and Winter 1930-1931. They give no hint of the coarse texture associated with the first rayon crepes. Duplan is proud enough of *Duray* to mark the bolt so that the customer can see the name of the manufacturer, as well as that Crown Brand rayon yarn is used. We show two samples of Bemberg products:

Sheerio chiffon (Sample No. 2) from N. Fluegelman & Co. 55 White St., which is unique in the synthetic textile field because this chiffon has a permanent crinkle. It has a fashionable dull luster, is very durable and washable—appropriate for evening gowns, formal and informal afternoon wear, lingerie and children's clothes.

Radium (Sample No. 3) is now available from C. K. Eagle & Co., 270 Madison Ave., for lingerie, blouses and linings. This fabric really improves with wear and laundering. Whites stay white and colors fast.

Celanese shows the skill of the designer in

the weaving of solid color crepes. They are not cheap fabrics. Each has a trade name which can allow the customer to become interested in the material before the hurdle of prejudice against rayon appears.

The interesting texture of *Mirrocel* is due to the use of two tightly twisted threads which together make a loosely twisted two-ply yarn. The dullness of the surface and the weight of the fabric make it suitable for a winter when wool is anxious for recognition.

Crepe Ondese is a very rough heavy crepe which uses Celanese and spun silk. Style, whether for solid color or for wool must be watched and catered to as in a Nib Cloth using Celanese and worsted.

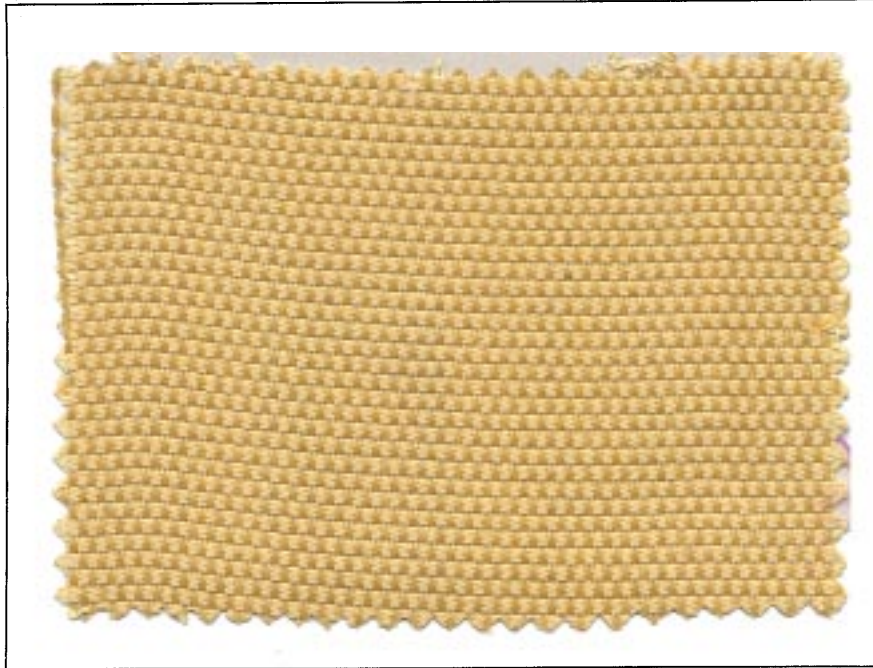
In many rayon and wool fabrics the percent of rayon is very high. Rodier used 75% rayon in *Asperic*, a very much used (both in original and domestic copies) dress material of two years ago.

Continued Development in Knit Fabrics

Knit fabrics using rayon are giving a satisfaction which is evidenced by increased volume of sales. In men's hosiery, they say that more rayon items are sold than of cotton and silk together. In women's hosiery, Bemberg has been made into a 42-gauge (the construction most in demand in silk) full-fashioned number.

The stocks of rayon knit underwear which the stores are carrying are constantly increasing. They show also a progressive advance in the appearance and qualities of the fabric, as well as in the styling of the garment. The “tubing” of seven or eight years ago has developed into a fine gauge construction which reduces the tendency to drop stitch; the use of multifilament yarns works in the same direction, as well as improves the appearance and feel of the fabric. One hears less complaint of drop stitching. Then there is the tricot construction which “reinforces silk” with rayon (made by any of the four processes); this has always given service and satisfaction.

In knit outerwear, the French designers and makers have helped to stamp fashion's approval deeply on rayon-wool fabrics (the rayon usually predominates). In fact as one looks



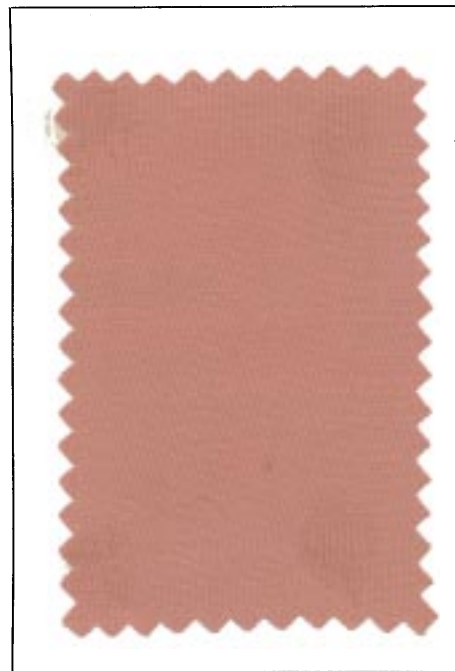
Sample No. 1

"Lamicel" Made by New England Spun Silk Corp. Dobby Weave Fabric with Spun Silk Filling, Alternating the Lamicel Warp with a Fine Spun Silk Yarn



Sample No. 2

"Sheerio Chiron" Made by American Bemberg Corp. Courtesy of N. Flugelman & Co., 55 White St., New York



Sample No. 3

"Radium" Made by American Bemberg Corp. Courtesy of C. K. Eagle & Co., 270 Madison Ave., New York

at knit outerwear and piece goods in high class stores one is almost sure to find rayon present in those which are highest priced. Domestic jerseys which started as all-wool now add rayon for a livening touch which sometimes changes them in the selling talk into "silk and wool."

Knit texture is so popular for sport and so satisfactory for service that a Sase fabric has been designed with the mesh effect of knit goods, but with a firmness due to weaving.

Lingerie has been using woven rayon for a long time—chiefly in slips. Rayon crepes, when introduced, accounted for a large percentage increase in the use of rayon fabrics for this purpose. A close weave producing a fabric of the radium type is now being made of Bemberg. Its fine texture and light weight appeal to the fingers as well as to the eye. It is said that the customer "buys on style and kicks on quality"; this material should not come back for adjustment on the score of durability or washability. Lingerie uses the sheer rayon crepes for single items and handsome ensembles. In lounging robes, ladies and gentlemen prefer rayon according to inventory and research figures.

Sportwear Fabrics

Rayon, especially in combination with other fibers, finds increasing use in sportwear fabrics. The possibilities for colored woven as well as cross-dye effects are practically unlimited. Sample No. 5 may serve as an illustration. It is made from Enka yarn and Spun Silk.

The exact description of this fabric follows: Quality Enka CC44; Construction: warp 150/24 denier first quality American Enka Rayon, 48/2/1 reed, 96 sley, 4 shaft plain weave with 56 picks of 22/1 Spun Silk fast dye nub-filling from Champlain Silk Mills, Inc. No. 9207. (Other Am. Enka fabrics will be shown in our next (January) issue.)

Other Uses

Rayon is entrenched in the lace field in the popular *Cire* lace which has a heavy rayon figure on a silk ground. This lace, woven crosswise on the Lever's machine is firm enough to cut easily and heavy enough to hang

well; it is flattering to the figure and to the skin; it does not show spotting or creases—what more can a woman want?

Plain nets made on a bobbin net machine of the same type as that invented by Heathcoat in 1809 use silk warp and Bemberg diagonal (traverse) threads. The rayon gives the weight which is considered so desirable in dress nets. On the other hand, fine denier Bemberg is used by the Rhode Island Lace Works to weave a dainty all-over lace fabric suitable for dressy use.

We have rayon which looks like wool and rayon which is used like wool. The former is a stiff crimped staple rayon which has been used in lumberjack fabric. Usually buyers and salespeople are surprised to learn of the rayon content. Sase is one form of rayon which is used like wool, for example in rugs of Wilton construction.

Men like the high style of rayon neckties even if they do not know the rayon content. Celanese makes a Barathea-like weave for this purpose and many high priced novelties in neckties and scarfs owe their handsome effect to rayon made by some one of the four processes.

Drapery and Upholstery Materials

In draperies, curtain materials, and upholstery fabrics, rayon has displaced silk almost completely. For one reason, experimenters say that rayon is weakened by sunlight four times less quickly than silk is. Rayon is used to make sheer voiles (all rayon) and marquises (with a cotton warp). In these cases the stiffness of rayon yarns is an advantage, for the material does not look "slimsy" as the cotton originals so often do.

The American Bemberg Corporation is experimenting with an all-Bemberg marquise in which twist adds unusual strength as well as low luster. This fine textured fabric is made of the low denier yarns in which Bemberg specializes.

Drapery damasks, in a wide price range have made rayon their own. Some have rayon warp, some cotton warp. To all of them rayon gives a brightening touch, and a stiffness which adds a formal effect. Recently a brocatelle



Sample No. 4
 "Sase" Made by Fitchburg Yarn Co. Print Fabric with Rayon Warp



"Enka" Made by American Enka Corp.
 Warp 150/24 denier
 1st quality Am. Enka Rayon, 48/2/1 reed, 96 sley, 4 shaft plain

weave with 56 picks of 2/21 Spun Silk fast-dye nub-filling from Champlain Silk Mills, Inc. No. 9208

Sample No. 5



Samples No. 6 and 7
 "Acele" Made by DuPont Rayon Co.

using rayon has been manufactured and introduced.

Cotton strengthens the rayon but in drapery and other fabrics there is still the shrinkage problem. Some of the rayon manufacturers have advertised that their yarns do not shrink—certainly by the time they are manufactured they do change in size. Some rayon yarns stretch when wet and do not return to the original length when dry. This shows up in cotton-rayon curtain materials. Strange to say, the customer's complaint in these materials is about shrinkage. Simple tests show that it is the cotton warp which shrinks and that the rayon stretches—and so another customer prejudice can be overcome by demonstration.

In the case of one type of rayon voile curtains, customers and store buyers have complained because the bottom of the curtains, after laundering had very uneven hem lines. This has been shown to be due to the shrinkage of the cotton thread used in sewing the hems.

According to a late summary, at least three different firms besides The Celanese Corporation are making, or plan to be making acetate process rayon commercially; another firm besides The Bemberg Corporation is working to produce cupra-ammonium rayon; then too there are several firms making staple rayon—and each of these products will have a trade name. Consequently it seems important from an academic point of view that extra emphasis

be put on the names of the processes of making rayon and the general characteristics of the product—no matter whether we are training college students or store people. Then when a new trade name is launched in the rayon field it will be easier for the novice to know what to expect.

Consider *Acele*, (See Samples Nos. 6 and 7) a new yarn made by the Du Pont Rayon Company. Advertisements describe *Acele* as an acetate process rayon. To merchandise people, trained so that process names have registered (as well as trade names), the fundamental characteristics are an open book. As for *Acele* itself—the makers stress the distinct characteristics of acetate process rayon, as well as its particular values—its softness and consequent value in combining with silk; its high tensile strength and resistance to abrasion. *Acele* stresses a *Peau Ducele* made entirely of its yarn and urges its desirability for evening gowns because it has been constructed so as to give the crisp luxurious effect so desirable for the new silhouette. *Nacele*, a new sheer cloth for draperies and bed spreads, combines an interesting texture with a pleasing draping quality. Other sheer *Acele* fabrics are being made for the dress trade.

In an addition to this article to be published in the January issue we shall briefly discuss and show samples of Enka and Viscose (Crown Rayon) fabrics.