

WEAVING ALONG SUGAR RIVER

By ELEANOR ADAMS



*Barbara Badmington Holden
Wearing a Handloomed suit.*

SUGAR RIVER Fabrics, Inc., at North Newport, New Hampshire, on the picturesque Sugar River, was founded in 1947 by the late Leslie E. Badmington, his son, Sherwood E. Badmington, who shortly before had returned from army service in the Far East, and Curtis H. Caldwell, treasurer, formerly a broker and banker. The senior Mr. Badmington had been associated with the woolen industry throughout his entire career, in the field of quantity production. Sherwood Badmington early had decided on woolen textiles as a career and before the war had attended Lowell Textile Institute in Lowell, Massachusetts. Barbara Badmington Holden now is vice-president of the firm, and handles much of the selling outside of North Newport.

In establishing this small weaving enterprise, Leslie Badmington realized a life-long ambition—to create original designs and produce fine quality woolens for persons of discriminating taste. The business was organized on a production basis, because its founders believed that such an organization lent itself best to their purpose—the making of a wide variety of patterns and color combinations in limited amounts.

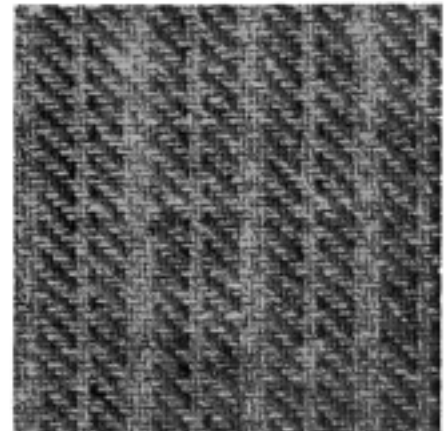
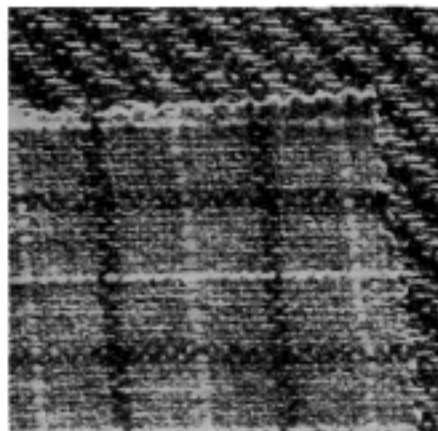
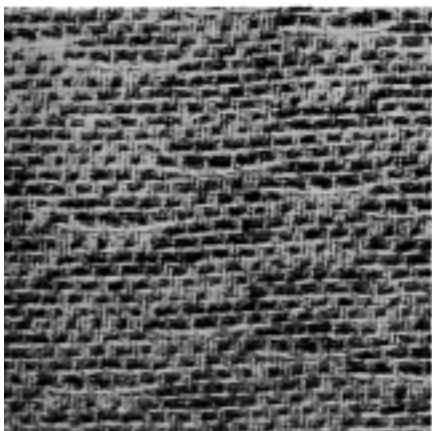
Sherwood Badmington is now president of the firm and its

chief designer. In addition to his own designs many of the patterns now in production are his variations of those created by his father, who had always had an intense interest in the history and theory of weaves, their relation to mathematics, rhythm, and symmetry, and the wide possibilities in this field open to a small weaving plant.

The best way to describe the workings of this small concern is to take an imaginary tour with the president.

The building formerly housed a scythe and hoe shop, famous in Civil War days. Its products were fine examples of handicrafts. It was odd, yet extremely fortunate, Mr. Badmington said, that the layout of the shop was so ideally adaptable for their purposes. First of all, there is a turbine type (horizontal) water wheel which, driven by the water of the Sugar River, turns all the machinery used in making the yarns and dressing the warps for the hand looms.

The back of the mill houses the stock room and picker house. In the stock room at the back are stored bags of raw wool which have come from the large Boston market, including Australian, South American and domestic wools from the southwestern part of the United States which go into the



Representative of the tweeds and other wool fabrics from the Sugar River looms. New designs and variations developed from the original Leslie Badmington patterns. To the left, a fancy weave fabric is developed in gray with green. Light and dark natural yarns are used in the second design, shown here with the plaid which is in brown and yellow. The twill on right is developed in purple, rose, and gray. Note: all Sugar River twills run to the left in British style.

blends for the Sugar River yarns. Fine (60's or better, as they are called in the trade), long staple wools are used exclusively, in order to achieve the desired "handle" in the finished fabric.

Some of the wool is dyed, some in its natural state—white wool and so-called grey wool from black sheep, actually a dark brown in color. A great deal of the natural wool is used both by itself and in blends. It is, incidentally the natural white, tan, and brown weaving yarn made from these undyed wools which Sugar River offers for sale to individual handweavers. The plant is not equipped to do its own dyeing so where color is desired the natural white wool is dyed to Sugar River's own specifications by a regular dyeing firm. Some of these dyed wools are spun into solid colored yarns, while others are blended together to make the special mixtures.

From the picker house, the blend is taken towards the front of the mill to a large room which contains the rest of the preparatory machinery. Here the card blends the stock more thoroughly, partially combing the fibers into untwisted, continuous strands, prepared for spinning. The final carded product, called roving, is transferred from the card on huge spools to the spinning mule which spins it into yarn. The spinning mule—much better known in the mills by that name than by the term "jenny"—is a machine that, by controlled stretching and twisting of the individual ends of roving, gives the roving a new strength and texture, converting it into yarn ready for weaving.

Warps are dressed, or prepared for the looms, on a sectional reel and then wound onto the loom beams. The ends, or warp threads are then drawn in and reeded in this same room. Then the whole affair—beam, harnesses and reed—is taken into the front room of the mill where it is hung in the loom, ready for weaving.

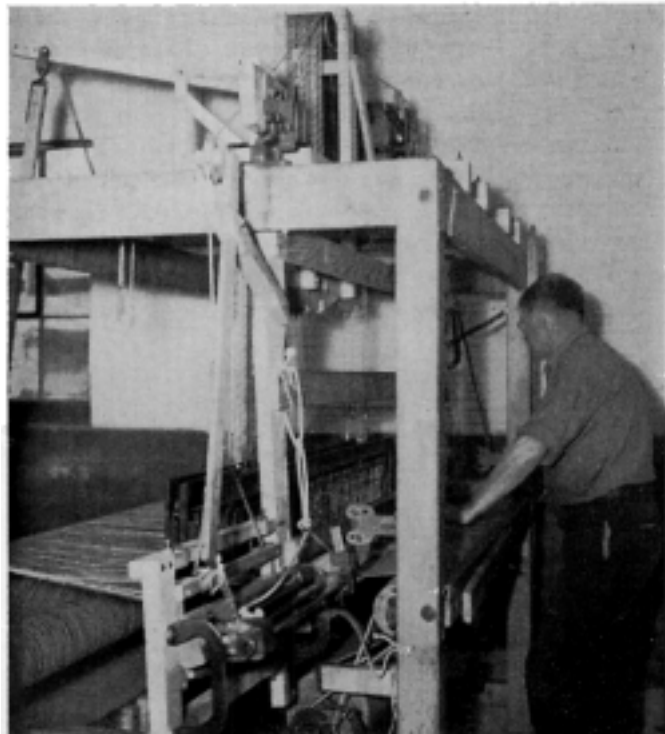
The looms have a 72-inch reed space (to make the finished cloth 54" - 56" wide), and are specially built to handle up to twelve harnesses. Many of Sugar River weave designs require all twelve of these harnesses, while others, of course, are woven on eight, six, or four. "We never use less than four harnesses even for plain weaves," Mr. Badmington said. Except for width, the looms resemble very much the Galashiels (Scotch) looms. The shuttles are not thrown by hand, but are knocked across the wide raceway by a wooden picker which is pulled by a rope held in the weaver's hand. Thus the shuttle receives its motion directly from the weaver. "It is our contention that this is throw shuttle weaving, not fly shuttle," Mr. Badmington declared. "We distinguish between this and a fly shuttle. The fly shuttle does not receive its motion directly from the weaver but is knocked across by a picker, which in turn is automatically set in motion by the movement of the lay (or 'beater'). In other words, in fly shuttle weaving the weaver operates the harness treadles and the lay only, and does not throw the shuttle with a separate motion of his hand."

After the cloth comes off the looms, it is finished in the regular mill manner. Since the warps are anywhere from fourteen to sixty yards in length, it would be a difficult matter at best to finish them by hand.

In the frame building which adjoins the small plant, part of the original scythe factory, there is a pine-paneled sales



Old scythe mill where Sugar River fabrics are woven.



One of the looms at the Sugar River plant.

shop where much of the material produced is sold at retail. Women purchase the tweeds for suits and topcoats, men buy them for jackets and suits. The majority of the cloth is in an 11- or 12-ounce weight, usually favored for suits and jackets, but a heavier 15-ounce fabric has been made also, and recently an 8-9-ounce dress weight material was developed. Sugar River fabrics are available, too, through custom tailors, fabric shops, and small specialty shops. For the latter, special styles are often created, following their own suggestions with respect to color and design.

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