

Chapter 3

MATERIALS AND EQUIPMENT

Embroidery Ground Fabrics

The selection of suitable embroidery ground fabrics is extensive. Good choices are dress weight silks and woolens in addition to some silk and rayon drapery and upholstery fabrics—the latter sold through not only home furnishing shops but also some ecclesiastical suppliers. Ultra-suede can be used with care. Velvet and velveteen also are possibilities but can be difficult with which to work since the pile shifts and flattens easily. Polyester fabrics should be avoided except Skinner's polycrepe, "Lutesong". Do not select a fabric which is sheer or loosely woven.

The color of the embroidery ground fabric is an important consideration. For example, a rich red fabric will intensify the brilliance and warm color of gold threads while the same threads will be softer and cooler in color on a blue fabric. Both gold and silver will be the most dazzling on a dark colored fabric, with the most dramatic effect created on black.

The surface of the embroidery ground fabric is another important consideration. A lustrous fabric will intensify the brilliance of metals. If a design is worked primarily in metals, a somewhat textured fabric is particularly attractive.

Backing Fabric

Unless of a heavy nature, embroidery ground fabrics require a strong, tightly-woven foundation fabric underneath to support the weight of the metal threads. The preferred backing is a medium-weight linen—heavier than handkerchief weight and lighter than tablecloth weight. Cotton muslin

can be used if linen is not available, but it is not as strong as linen and stretches more easily, the latter resulting in a more frequent need to re-tighten the fabrics on the working frame. Whatever backing fabric is used, it should be preshrunk before attached to the frame.

Working Frame

Since metal thread embroidery cannot be blocked, it is most important that the backing and embroidery ground fabrics are supported on some form of frame during the entire embroidery process. When stretched tautly on a frame the fabrics do not pucker, the metal threads are attached with the proper tension to remain flat when the fabrics are removed from the frame, and any padded areas will correctly rise only to the top of the fabrics.

Artist's stretcher bars make the most convenient working frame to use. When the lacing method of securing fabrics to the frame is to be used (Refer to Chapter 4) either a slate frame or a roller-type tapestry frame can be used. With the latter, it is necessary that the frame's dowels can be held securely enough so that the fabrics remain constantly in a taut position.

Needles

Crewel needles of various sizes are necessary for the embroidery threads. For the couching threads, use #10 for silk sewing thread and single ply silk filo-floss and #9 for maltese silk. The #10 will be necessary for attaching small sizes of soft purl.

Chenille needles are used to "plunge" the metal threads. The needle acts as a stiletto to produce a hole in the fabrics so the metal can be taken to the back of the work. Several sizes are necessary because it is most important that the proper size be used in relationship to the diameter of the metal to be plunged. If the eye of the needle is too small the metal can be damaged when pulled through the fabrics and if too large the hole produced will be oversize and the metal will have a tendency to pop back toward the front of the work. Sizes #18 and #20 are suitable for plunging the majority of the metal threads, #16 being required for the particularly heavy twisted cords.

Threads for Attaching Metals

A single ply of silk filo-floss is used to attach metals when a "flush" of color or an obvious pattern on the metal is desired. The only filo-floss easily available at the present time is the Zwicky Floss, a 6-ply Swiss silk.

For inconspicuous, "invisible" stitches to attach the metal threads, the fine Belding Corticelli (Type A) silk sewing thread is very suitable. Use color #3715 for gold metals and #7608 for silver metals. Pearsall's maltese (horsetail) silk is best used when a particularly strong couching thread is required, such as to attach large twists and purls. But, since this silk is thicker than the silk sewing thread, its presence on smooth metals is too obvious. It is available in dark gold, light gold, and grey. Both of these types of silk need to be waxed.

Other Threads

A wide variety of threads can be used for not only decorative couching but also surface stitchery used in combination with metal thread embroidery. The most elegant effect will be created by the use of silk threads, such as filo-floss, Soie d'Alger, Kanagawa and La Paleta twisted embroidery silk, Kama-ito "twisting" silk, Belding Corticelli buttonhole twist, and various silks used for weaving. Cotton, linen and wool threads can also be used.

Padding Materials

Areas to be covered with metals can be raised with various materials.

Felt: Felted cotton or wool can be used to produce a rounded, raised surface, the height depending upon the number of layers used. It is preferred to use gold or dark yellow under gold metals and gray or pale blue under silver metals. Felt is not suitable for filling tiny shapes or narrow lines in that small cuttings shred easily.

Embroidery Threads: Used in suitable color to match the metals, thick cotton, linen or wool threads produce a soft, raised surface. The final effect is much the same as with felt and the latter is usually easier to use.

Card: Used in suitable color to match the metals, poster board produces a rather severe raised surface, particularly on the edges.

String: Jute wrapping string, macrame jute, and linen cord are used not only for the raised foundation of "basket work" but also to raise any width straight or curved line. Avoid the use of cotton string for it is usually too soft and shreds too easily. Unless pre-waxed by the manufacturer, all types of string must be heavily waxed before used—rub the string over beeswax many times.

Additional Equipment

The need for some of the following miscellaneous equipment will depend upon the method of dressing the frame, of transferring the design and how the embroidered piece is to be finished.

For Dressing the Frame

- Yardstick or metal tape measure.
- Square or T-square.
- Straight pins, basting thread, and scissors for cutting fabrics.
- Small nails to secure the corners of the working frame.
- Tissue paper.
- Lightweight staple gun and 1/4" staples. Heavy duty thumb tacks may be used instead.
- Heavy string that is strong and tightly twisted and drill cloth or other fabric which is heavy and tightly woven for a laced frame.

For Transferring the Design

- Dressmaker's carbon paper in a color that contrasts that of the embroidery ground fabric.
- Hard lead pencil or ballpoint pen which has run out of ink.
- Basting thread.
- Scotch tape.
- Book of the same thickness as the working frame and of a size which will fit within the inside measurements of the frame.

For the Embroidery

- Two pairs of small, sharp scissors—one for cutting embroidery threads and another for cutting the metals. For the latter a good choice is slightly-curved, long-bladed cuticle scissors.
- Beeswax.
- Small ruler with 1/8" markings.
- Large handkerchief to cover the embroidery when the work is put away.
- Either acid-free tissue paper or felt-lined, air-tight box to store the metals.
- 6" by 9" piece of felt made into a 6" long roll onto which the fragile metals, such as Japanese Metal, can be wrapped for ease in handling and prevention of damage.

For the Embroidery (cont.)

- 3"square of felt glued onto a 3" square of heavy cardboard on which to cut soft purls.
- C clamp or alligator-type clamp to secure the working frame to a table or some other type of support which will hold the frame.

For Mounting the Finished Work

- White cotton baby flannel or felt.
- Upson board, double layer of heavy cardboard, or plywood.
- Rag paper.
- Heavy duty thread for lacing.
- White library paste and white tissue paper.

Optional Equipment

- Tensor lamp or other type of small lamp which can be moved around easily.
- Magnifying glass, preferably one which is on some type of stand.