

Leather with Personality

By D.S. Marston

Salz Company: West Coast Producer of Leather for Luggage and Personal Leather Goods, Features Natural Markings of the Hide. The Leather Is Tanned with California Oak Bark.

An experienced tanner, using the palm reader's clairvoyance in reverse, can study the lines and markings on a cowhide as it comes from the tanning vats and reconstruct much of the life history of the animal. The symbols burned deep in the flank or the shoulder he would recognize as the brand mark of the ranch from which the animal came. There might be two or more sets of these marks, different in design, for whenever a cattle raiser sells stock to another rancher, a new mark is applied. As a result, there are hides in which a considerable portion of the surface has been seared by the branding irons.

A long, irregular scar along the side of the hide was probably a cut from barbed wire, stretched along the boundary of the grazing range. Smaller scratch marks may be the result of an encounter with thorns or briars, or the abrasion caused by too-vigorous scratching against the walls of the corral.

Roughly circular scars near the backbone area are the work of the grub or warble fly. This pest lays its eggs on the animal's hair, generally on the legs down near the heels. The eggs hatch into grubs that work their way through the skin by following a hair follicle, and live inside the animal for weeks or months. During this period the grub undergoes a number of changes or molts, growing larger each time, as it makes its way up to the area along the animal's back where it 'burrows through the hide and escapes. The scar results from the healing of the hole where the grub escapes. Smaller scars of a similar nature are caused by the bites of mites, lice, ticks, fleas or other insects.

Finishing Problem

It is difficult to discuss such markings on a hide without referring to them as defects or blemishes. They are commonly so regarded, and with good reason. Manufacturers of leather goods who produce standard lines in large volume require thousands of square feet of leather that is uniform in color and surface texture. Leather makers have developed remarkable ability in transforming hides—always non-uniform as a raw material—into a finished product that meets this exacting need, but the presence of brand marks, scars and other irregularities in the grain makes the tanner's work much more difficult.

There are applications, however, where completely uniform leather in large volume is not required. Luggage and personal leather goods, for example, are especially prized when they are custom-made of distinctive leather. In the production of such leather goods, the markings on the hide are desirable features. The healed scars are as resistant to wear as is the rest of the leather, and properly selected hides, expertly finished to take full advantage of the surface irregularities, produce a leather of outstanding character and beauty.

The West Coast tanning firm of A. K. Salz Company, Santa Cruz, California, has developed to a high degree of perfection the technique of tanning and finishing leather with its natural grain markings. The company even has a trademarked name for the leather--California Saddle Leather. The name is not particularly descriptive of the usual application for the leather, for more California Saddle Leather is used in the manufacture of luggage, handbags and personal leather goods than in the production of saddles, but the leather has a soft, mellow luster, reminiscent of a cowboy's well-worn saddle.

The A. K. Salz tannery has been making leather in its present location for a long time. The first hides were "put down" in the tan vats in 1861, only eleven years after California was admitted as the thirty-first state of the union. Then, as now, the chief tanning material was the bark of the *Lithocarpus Densiflora*, an unusual species of oak which grows almost exclusively in the Coastal Range of Northern California.

Selected Hides

The manufacture of California Saddle Leather begins with selection of the hides, and this is a particularly important step at the Salz tannery. As Norman Lezin, president of the company, points out, "The fact that our process features, rather than conceals, the natural markings of the hides means that the raw stock must be chosen with special care. The hides are purchased in the summer when the steers are in prime condition and are stored in our refrigerated hide house until they are needed in the tannery."

The tanning process, from start to finish, represents a combination of techniques—some almost as old as leather itself, and others that are the result of modern research in the science of leather-making. It is a slow, painstaking process, starting in the old beamhouse where the hides are placed in vats for unhairing. Many of these vats are as old as the tannery, and the hides are still moved from vat to vat by the original method of drawing the packs with ropes. The unhairing process itself, however, is strictly up-to-date. The action of the conventional lime and sodium sulfide unhairing bath is improved through the use of dimethylamine sulfate, the first of a number of leather chemicals from Rohm & Haas Company which have application in the Salz tannery. The dimethylamine compound is an effective aid in the unhairing process, loosening the hair efficiently and helping to produce a full, close-fibered leather.

When the hair is loosened, the hides are passed through unhairing machines where dull, rotating knives remove most of the hair. The machine action is followed by a hand operation known as scudding or hand beaming. The moist, flabby hides are thrown over a curved block, or beam, somewhat resembling the shape of the animal's body, and men, wielding vicious-looking, two handled knives, work over every inch of the hide to remove any hair the machines may have missed. This highly-skilled process removes the remaining follicles, or scud, thus cleaning the pores and aiding in the production of a leather of pleasing color and texture.

Next comes bating, and here another Rohm & Haas product, Oropon, has application. The use of Oropon, prepared enzymatic bate, is well-established in the beamhouses of tanneries throughout much of the world. Probably no other trade-marked material is more universally employed in the leather-making process. This product consists of a standardized mixture of proteolytic enzymes and deliming salts, and is available in various grades, making it suitable for use in the production of all types of leather, from the heaviest cowhides to the lightest kips and skivers. The bate removes excess lime and unwanted protein materials, smoothing the grain and leaving it in proper condition to receive the tan liquor, the next step in the tanning process at Salz.



After hair and flesh have been removed chemically and mechanically, each hide is hand-scudded, as shown here, to produce leather of even grain and depth.

Redwood Tanning Vats

In the Salz tannery there are about one hundred tanning vats, all made of redwood from the forests around Santa Cruz. These vats apparently never wear out, for those which were built when the company began operations in 1861 are still in constant use and are in perfect condition. The wood does not corrode and has no contaminating effect on the tan liquors.

Redwood also serves as "piping" in some applications in the tannery. Hollow, redwood logs bring the tan liquors from the leaching tanks, where they are extracted from the ground up California Oak bark to the tanning vats. These log pipes, as old as the tannery, are as sound as if they were made of the most modern, corrosion-resistant materials.

Unusual Tan

The Lithocarpus, or California Oak, bark tanning liquor produces a leather of golden russet color that is not readily obtained with any other tanning material. At the same time it imparts strength and pliancy to the fibers of the hide, required in a top quality leather such as California Saddle Leather. The hides remain in the tanning vats for weeks as they slowly absorb the tannins and oak sugars from the tan liquor. Nothing is done to hurry this process, for quality rather than quantity is the object of the skilled tanners at Salz Company.

After tanning, the sides are sliced to facilitate handling in subsequent operations. Only the durable top grain is sold as California Saddle Leather. The splits below the top grain are finished and sold to manufacturers who desire a less expensive leather.

Fat-liquoring

The basic properties of the leather are determined by the work in the beamhouse and the tanning processes, but the operations which follow tanning also play a part in the characteristics of the product. The first of these steps is oiling, or fat-liquoring—an operation which restores the natural oils to the hides. The oils lubricate the fibers, insuring strength and flexibility in the finished product.

Plating

Before the final step of plating, an additional clear protective finish may be applied if the end use of the leather requires it. For this finish two products from the Rohm & Haas line of leather finishes may have application—Primal, acrylic base coat, and Orthoclear, transparent nitrocellulose lacquer top coat. Then the leather is plated by pressing between the smooth, hot platens of a huge press which exerts a total force of some three hundred tons against the leather. This compresses and smooths the grain and produces the gleaming, burnished surface which is characteristic of California Saddle Leather.

The story of the A. K. Salz tannery is primarily a story of California Saddle Leather in the natural russet color, for it is in the production of this distinctive leather that the company takes special pride. A visitor to the plant, however, will see some sides of this fine, top-grain leather finished in rich reds, gleaming greens, and other colors. These brilliant aniline colors are highly popular today, and Salz produces a limited quantity of carefully finished leather for this special market.

Family of Craftsmen

California Saddle Leather— "the leather with the friendly feel" —is unusual in its production and distinctive in its appearance. It is also unique in its merchandising, for—although A. K. Salz Company produces only leather and makes no finished products—the firm advertises in national magazines which reach the consumer market as well as in the more conventional trade publications. The company feels that through this means, it can contribute to the centuries-old

tradition that fine leather, with its "personality marks" treated as virtues rather than as blemishes, is a possession to be cherished.

Sources

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