

**PRINCIPLES AND  
PRACTICE OF  
FUR DRESSING  
AND FUR DYEING**

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Principles and practice of fur dressing and fur dyeing by William E. Austin

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**WILLIAM E. AUSTIN**

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CALIFORNIA

PRINCIPLES AND PRACTICE  
OF  
FUR DRESSING AND FUR DYEING

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*ILLUSTRATED*



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## PREFACE

**T**HE great increase in the use of furs during the past few decades has caused the fur dressing and dyeing industry to rise from relative insignificance to considerable importance as a branch of applied chemistry. The past eight years, moreover, have witnessed the virtual transference of the leadership in the dressing and dyeing of furs from Europe to America, and in the quality and variety of products, the domestic industry is now in every way the equal of, and in many respects superior to the foreign. The great bulk of American furs which formerly were sent to Leipzig, Paris or London to be dressed and dyed, are now being dressed and dyed in this country.

In spite of these facts, very little is generally known about the nature and manner of the work constituting the dressing and dyeing of furs. Even among members of other branches of the fur trade, there is very little accurate information on the subject. Real knowledge concerning fur dressing and dyeing is possessed only by those actually engaged in the industry. The interest and efforts of scientists and technologists have been enlisted to only a small extent in the technical development of the industry. The reason for this may be attributed to two related causes: first, the almost monastic seclusion in which fur dressers and dyers, particularly the latter, conducted their operations, and even to-day the heavy cloud of mystery is being dispelled but very slowly; and second, as a consequence of the first, the lack of any reliable literature on the subject. Of the few books which have been written on the industry of fur dressing and fur dyeing (all of them either German or French), most are hopelessly out of date, or contain no trustworthy data; or, if they do have real merit, they cannot be obtained.

## PREFACE

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Numerous articles in the technical journals are of interest, but they contain very little information of value.

This work is intended for a two-fold purpose: first, that it may serve as a text-book for those who expect to make fur dressing and dyeing their vocation. The fundamental principles upon which the industry is based are discussed in the light of the most recent chemical and technical developments, and the most important operations are treated fully and systematically, and are illustrated with practical examples.

Secondly, as a practical handbook for the worker in the fur dressing and dyeing plant. The latest factory processes and methods are described, and numerous working formulas given. The formulas are all such as have been successfully used on a large scale, and give satisfactory results when applied under the proper conditions.

In addition, it is believed that the book will prove of interest to chemists and other students of industrial chemistry, since it will be an introduction into a field of applied chemistry, about which very little is known to those outside of the industry.

Thanks are due to Dr. L. A. Hausman, of Cornell University, for material used in Chapter II; to Dr. E. Lesser of the American Dyewood Company, for information and assistance on the subject of Vegetable Dyes; to the Gaskill Chemical Corp., American Aniline Products, Inc., the Cassella Company, and the Franklin Import & Export Co., for information about their products in connection with the chapter on Oxidation Colors; to F. Blattner, Fletcher Works, Inc., S. M. Jacoby Co., Proctor & Schwartz, Inc., Reliable Machine Works, Seneca Machine & Tool Co., Inc., and the Turner Tanning Machinery Co., for the use of the cuts of the various machines.

WILLIAM E. AUSTIN.

NEW YORK, May, 1922.



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# FUR DRESSING AND FUR DYEING

## CHAPTER I

### FURS AND THEIR CHARACTERISTICS

**F**URS have in general two uses: as the goods which constitute the basis of the furrier's art, and as the source of material for the hat manufacturer. In the latter case, only the hair part of the fur is utilized in the hat trade for the production of felt, the skin being either made into leather, or used as the raw material for making high-grade glue and gelatine. It is the furrier, therefore, who uses the great bulk of furs, and requires them to be dressed and dyed. *intro*

In discussing the dressing and the dyeing of furs, there are, broadly speaking, two fundamental subjects to be considered: first, the raw materials employed, which are, of course, the skins or pelts as they come from the trapper. (Other substances used in fur dressing and dyeing are accessories, and will be studied in connection with the processes.) Second, all those operations, physical and chemical, manual and mechanical, to which the raw skins have to be subjected in order to obtain the finished fur, ready for use by the furrier.)

Next to the inherent qualities of the fur skin, the future value of a fur in a manufactured garment depends largely on the dressing and dyeing it receives. It is in these operations that the beauty of the fur can be brought out to its fullest degree, and if possible, enhanced, or the attractive features can be marred or destroyed, and the fur rendered quite worthless. Therefore, it is quite essential for the fur *Intro*