

IN THE MATTER OF
ABBEY BRUSH CORPORATION ET AL.

ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF THE
FEDERAL TRADE COMMISSION ACT

Docket 5802. Complaint, Sept. 1, 1950—Decision, Apr. 8, 1957

Order requiring a manufacturer in New York City to cease stamping the handles of brushes which contained various quantities of horsehair with the words "Pure Bristle", thereby representing falsely that the material composing the brushes consisted entirely of the much higher priced bristle of swine.

R. P. Bellinger, Esq., attorney for the Commission.

Schwager, Landau & Krantz, and *Hamilton Lieb, Esq.*, New York, N.Y., for respondents.

INITIAL DECISION BY JAMES A. PURCELL, HEARING EXAMINER

THE PROCEEDING

The Federal Trade Commission, by virtue of authority vested in it pursuant to the provisions of the Federal Trade Commission Act, did, on September 1, 1950, issue its complaint against respondents, Abbey Brush Corporation, a corporation organized and doing business under and by virtue of the laws of the State of New York, and its officers, individually and in their representative capacities, as noted: Henry Greenberg, President, Max Gartner, Vice President, and Joseph Sheldon, Treasurer, the office and principal place of business of all respondents being then located at No. 262 Mott Street, New York, New York. During the course of the proceedings the business addresses of the corporate and individual respondents have changed as follows: respondent Abbey Brush Corporation is located at No. 198 Avenue C, New York, New York; Max Gartner and Henry Greenberg, No. 198 Avenue C, New York, New York, and Joseph Sheldon, No. 810 Pennsylvania Avenue, Brooklyn, New York.

The complaint charges respondents with false and misleading representations that paint and varnish brushes manufactured and sold by them were composed of bristles, meaning and importing thereby, the hair derived from the swine or hog, for which bristles there is a decided preference on the part of the purchasing public; that such representations were in fact false in that respondents caused the fiber content of said brushes to be adulterated with cheaper and inferior products, to wit, horsehair and wood or vegetable fibers.

On August 6, 1951, the then officiating Hearing Examiner filed his order closing the proceeding before him after having received testimony and exhibits on behalf of, and in opposition to, the allegations of the complaint, all of which said testimony was stenographically reported and, together with the exhibits and documentary evidence related thereto, duly recorded in the office of the Federal Trade Commission in Washington, D. C., as required by law.

RÉSUMÉ OF THE RECORD

From this point the proceedings are rather lengthy and involved for which reason it is considered that a résumé thereof, in chronological form, will be of assistance in a ready appreciation of the matter and its history in the Commission.

On August 28, 1951, the said then Hearing Examiner filed an Initial Decision ordering that the complaint in this proceeding be dismissed, from which decision an appeal was noted by the attorney in support of the complaint.

During the interim, and while said appeal was pending and undisposed of, Petitions for Leave to Intervene were filed by the American Brush Manufacturers Association, the Eastern Paint Brush Manufacturers Association, Inc., and the New York Metropolitan Brush Manufacturers Association, all of which said Petitions were granted by the Commission, and, pursuant to permission contained in the granting orders, all of the petitioners filed briefs in support of their respective positions concerning the appeal from the Hearing Examiner's order of dismissal, said briefs, and the replies thereto, appearing of record in the formal proceeding.

On June 9, 1952, formal argument before the Commission was had on the appeal from the Hearing Examiner's Initial Decision and thereafter, before rendition of decision on said appeal, and on October 21, 1952, counsel in support of the complaint formally moved for withdrawal of his aforesaid appeal and for remand of the entire matter to the Hearing Examiner for the purpose of receiving additional testimony in support of the charges of the complaint.

On February 17, 1953, pursuant to the foregoing motion, the Commission passed its formal order which:

(1) Granted the motion of counsel supporting the complaint to withdraw his appeal from the initial decision;

(2) Vacated and set aside the Hearing Examiner's Initial Decision;

(3) Appointed a substitute Hearing Examiner, (the services of the Hearing Examiner who had rendered the Initial Decision being

no longer available to the Commission by reason of his retirement from public service);

(4) Reopened and remanded the proceeding to the Hearing Examiner for the purpose of receiving additional testimony; and

(5) Directed that after receipt of such additional testimony the Hearing Examiner render "an initial decision on the entire case."

By order of the Commission dated August 6, 1953, the undersigned Hearing Examiner was substituted with directions to proceed as authorized by law.

Hearings were held on February 25 and April 9, 1954, and thereupon, by reason of a decision of the Circuit Court of Appeals¹ and insistence by respondents that such decision made obligatory the trial of this matter *de novo*, the Hearing Examiner, on April 26, 1954, certified the question to the Commission for its determination of the future course of the proceedings, pursuant to which certification the Commission did, on October 29, 1954, order the Hearing Examiner:

to grant a new hearing for the purpose of resubmission of evidence bearing on the issues in this case which was not received by the present Hearing Examiner,

and that:

to the extent all parties expressly waive rehearing as to any evidence previously presented, rehearing shall not be directed.

At a formal hearing held in Washington, D. C., on November 10, 1954, specially called for the purpose of determining the status and future course of the proceeding in the light of the afore-quoted order of the Commission, all parties to the proceeding entered into a formal stipulation on the record, by the terms whereof it was agreed, in substance, that the entire record containing the testimony and evidence had before the original Hearing Examiner, as well also the testimony and evidence theretofore had subsequent to the remand, and thereafter to be had before the present Examiner, shall constitute the record on which the present Examiner shall base his findings and conclusions, the respondents thus abandoning their position contending for a trial *de novo*. Pursuant to such agreement the proceeding, after the reception of additional testimony and evidence in support of, and in opposition to, the allegations of the complaint, went forward to a normal conclusion, all of such additional testimony and evidence being filed of record as required by law.

¹*Gamble-Skogmo, Inc. v. F.T.C.*, 211 F. 2d 106 (1954).

Thereafter the parties filed their Proposed Findings as to the Facts and Conclusions based thereon and, additionally, the attorney in support of the complaint filed a Proposed Order, all of which have been separately ruled upon as required by the Rules of Practice.

THE ISSUE

The complaint, in paragraphs 5, 6, and 7, clearly, concisely and succinctly sets forth the one and only charge upon which the proceeding is based, such being paraphrased as follows:

In the course and conduct of their business and for the purpose of inducing the purchase of their said brushes, respondents have caused their handles of certain brushes to be stamped, marked or labeled with the words "*Pure Bristle*"; that the practice of stamping their brushes with the words "*Pure Bristle*" constitutes a representation to the public that the material of which said brushes is composed consists entirely of the bristle of swine; that there is a decided preference on the part of members of the consuming public for paint and varnish brushes that are made entirely of genuine bristle; and, finally, that in truth and in fact respondents' brushes are not composed entirely of bristle of swine but contain various quantities of horsehair.

The foregoing charge is simple and direct and raises but one question to be tried, that is:

"Are respondents' brushes 'Pure Bristle' as represented, or are they adulterated with horsehair?"

On the subject matter of the above statement of the issue to be tried, the Commission's order of remand of February 17, 1953, contains certain language which it is thought well to quote for its very definite value of putting the *sole issue* in this matter in its proper setting and perspective, as well also the steps necessary to be taken subsequent to the remand in order to rectify the apparent conflict of evidence and to overcome the obstacles pointed out by the order of remand, which obstacles made a clear-cut decision, one way or the other, impossible on the record as it then stood:

** * * It appearing to the Commission that the sole issue presented by the appeal is whether or not the respondents, by stamping on certain of their paint brushes the words "Pure Bristle," have represented, contrary to the fact, that such brushes are composed entirely of bristles of swine, and that the disposition of this issue depends primarily upon the answer to the question whether or not the brushes so stamped are in fact made entirely of bristles; and*

It further appearing that the evidence now in the record on this point is in sharp conflict, there being testimony of a microscopist of the National Bureau of Standards, based on his microscopic examination of cross-sections of fibers

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removed from four brushes manufactured by the respondents and the application of his "pattern of pigmentation" theory, that three of such brushes were in fact composed in substantial part of horsehair; and testimony of seven other witnesses, six of whom are experts in the field of bristle and horsehair and one of whom is a technical expert in the general field of animal hair, that all of the samples of fiber examined by them were composed entirely of bristles; and

*It further appearing that the record as so constituted does not provide an adequate basis for an informed determination of the issues presented by the appeal; * * * etc. [Italics supplied.]*

Pursuant to the order aforesaid the attorney in charge of the complaint introduced the testimony of five additional witnesses on the matter of fiber identification of contents of brushes. The respondents, while accorded opportunity to do so, did not offer any affirmative supplemental scientific or expert testimony or evidence subsequent to the remand, counsel contenting himself with cross-examination of the newly produced witnesses and offering the testimony of one of the respondents and a brush maker in rebuttal.

THE ANSWER

To the foregoing complaint respondents filed no formal written answer and the matter proceeded to trial apparently under the tacit understanding that the issue to be tried was as hereinabove stated. However, at the outset of the proceedings respondents, through their counsel, made certain verbal admissions of record concerning certain of the allegations of the complaint, such admissions being:

(1) That Abbey Brush Corporation is a corporation incorporated under the laws of the State of New York with its principal place of business at No. 262 Mott Street, New York City;

(2) That respondents Henry Greenberg, Max Gartner and Joseph Sheldon are officers of that corporation, and jointly dominate, direct, and control the policies, acts and practices of the corporation, and that their address is the same as the corporate respondent.

(3) That respondent corporation is now and has been engaged in the manufacture, sale, and distribution of paint brushes, in the doing of which respondents engaged in interstate commerce as charged in the complaint and as defined by law; that respondents' volume of business in said commerce, while "not substantial, might be said to be fairly substantial," and

(4) That respondents, in pursuance of the objectives of their business, are in competition with other corporations, firms and individuals.

With the issue thus joined, and the foregoing judicial admissions of record, the matter proceeded to trial.

PRELIMINARY STATEMENT CONCERNING THE TRADE PRACTICE RULES FOR
THE PAINT AND VARNISH BRUSH MANUFACTURING INDUSTRY

On January 14, 1939, the Commission promulgated its Trade Practice Rules for the Paint and Varnish Brush Manufacturing Industry, to which said Rules some twenty-seven paint and varnish brush manufacturers throughout the United States became signatory. These signers represent a large and important segment of the industry who, quite obviously, would not have accepted such rules for their guidance and observance had they felt the rules to be onerous or impossible of obedience, such as, for example, the production of a 100% pure swine bristle product sans horsehair or extraneous fiber admixture, as the respondents herein have contended. A certified copy of said Rules was introduced and accepted in evidence without objection from respondents' counsel, he stating: "No objection. I am familiar with that."

At the outset of any consideration of these Rules it is realized that this proceeding is not, in nature, an attempt to enforce the Rules as such, (respondents not being parties signatory and the Rules not having standing in law nor enforceable as such), yet, as said by Circuit Court in the recent case of *Northern Feather Works, Inc. v. F.T.C.* (#11,727, 3d Cir., June 5, 1956):

These trade practice rules were not taken as legal commands by the hearing examiner, the Commission or ourselves. But we think that a set of rules worked out in conference between a government agency and an industry can be taken as a guide if, to those responsible for enforcement, they are reasonable and fair. That is what was done here.

See also *Buchwalter v. F.T.C.* (Decided July 9, 1956) (#23,805, 2nd Cir.)

The foregoing reasoning being applicable to the circumstances of the instant matter it is felt that, for present convenience, the excerpted quotations from the Rules as here footnoted will demonstrate their applicability and coverage and that consideration of same will be enlightening and almost imperative as an adjunct to an informed decision.²

²"GROUP I. The unfair trade practices which are embraced in these Group I rules are considered to be unfair methods of competition, * * * prohibited, within the purview of the Federal Government, by acts of Congress; * * * and appropriate proceedings in the public interest will be taken by the Commission to prevent the use, * * * of such unlawful practices in * * * interstate commerce.

"Definitions: The * * * word 'brushes' as used in these rules embrace all types of brushes manufactured in the industry for use in applying paint, varnish, lacquer, calamine or other similar decorative or protective materials.

"The term 'bristle' as used in these rules is not to be construed as including any hair, fiber or material other than the bristle of swine.

"RULE 1—Misrepresentation of Industry Products:

"It is an unfair trade practice to make or publish, * * * any false, misleading or deceptive statement or representation, by way of advertisement or otherwise, concern-

It will thus be noted from the opening paragraph of the Rules that the Commission declares, and gives interested parties clearly to understand, that any violation of the Rules comprising "Group I" shall be considered a violation of the law and that appropriate proceedings will be taken looking to the enforced cessation of the proscribed acts.

Supplementing the Group I rules there appears, as Rule E of Group II, the following:

All-Bristle Brushes:

The industry records its approval of the marking or branding of all brushes composed wholly of bristle with the words "All Bristle", "100% Bristle", "Pure Bristle" or "All Pure Bristle", or with word or words of similar import or meaning, on the handle or ferrule thereof, to the end that the purchasing and consuming public may be correctly informed as to the content of such brushes.

From the foregoing it will be observed that the acts and practices charged in the instant matter have been the subject of official concern and attention of the Commission and of the industry for many years prior to the issuance of the within complaint. The rules are clear as to what is and what is not an 'All Bristle,' "100% Bristle,"

ing the grade, quality, quantity, use, size, material, content, origin, preparation, manufacture or distribution of any products of the industry or concerning any component of such products * * *.

"RULE 2—Misbranding of Industry Products:

"(a) The marking or branding of brushes with the words 'All Bristle', '100% Bristle', 'Pure Bristle', or 'All Pure Bristle', * * * when such brushes are in fact composed in whole or in part of material * * * other than bristle, or the use of the word 'bristle' in any manner having the tendency and capacity or effect of misleading or deceiving the purchasing or consuming public with respect to the bristle content of such brushes, is an unfair trade practice.

"(b) The deceptive marking or branding of brushes with respect to the grade, quality, * * * or in any other material respect, is an unfair trade practice.

"RULE 3—Disclosure of Composition:

"It is an unfair trade practice to sell, offer for sale, or distribute any brush the brushing part of which is composed, in whole or in part, of any material which by reason of its natural appearance or as a result of special processing simulates bristle, without clear and nondeceptive disclosure of the true composition thereof, where failure to so disclose the same has the tendency and capacity or effect of misleading or deceiving the purchasing or consuming public.

"(a) Such disclosure should be made by branding, stamping, or otherwise marking the handle or ferrule of the brush with the name of each of the constituent materials of the brushing part thereof in the order of its predominance.

"(Illustration: A brush composed of 60% horsehair and 40% bristle should be marked 'Horsehair and Bristle' or '60% Horsehair and 40% Bristle'.)

"Provided, however, (1) that the name of any such constituent material shall not be set forth in type or manner so inconspicuous, remotely placed, or disproportionately minimized as thereby to have the tendency, capacity or effect of misleading or deceiving the purchasing or consuming public in respect to the proportion of such material contained herein, or in any other respect, and

"(2) when bristle as a material is not contained therein in a substantial quantity, the percentage in which such material is present should be specifically stated, to the end that purchasers may not be misled or deceived into the belief that this material is present in greater proportion than is in fact true.

"(Illustration: A brush composed of 90% horsehair and 10% bristle should be marked 'Horsehair and 10% Bristle' or '90% Horsehair and 10% Bristle'.)"

"Pure Bristle," or "All Pure Bristle" brush, and it will be further observed that no tolerances for foreign matter, hair or fiber, are authorized or permitted.

Due consideration having been given to the evidence adduced, the contentions of counsel for all parties and the proposed findings and conclusions submitted by them in accordance with the Commission's Rules of Practice, the Hearing Examiner makes the following findings as to the facts, conclusions of law and order based thereon:

FINDINGS AS TO THE FACTS

1. Respondent Abbey Brush Corporation is a corporation organized and doing business under and by virtue of the laws of the State of New York, with its office and principal place of business, at the time of the issuance of the complaint herein (September 1, 1950), located at No. 262 Mott Street, New York, New York. At the time of writing hereof, the location of said corporation is at No. 198 Avenue C, New York, New York. Respondents Henry Greenberg, Max Gartner, and Joseph Sheldon are individuals and were, at the time of the issuance of the complaint herein, officers of respondent Abbey Brush Corporation, and as such dominated, directed, and controlled the policies, acts, and practices of said corporate respondent; respondents Henry Greenberg and Max Gartner are respectively, and as of now, the President and Vice President of the respondent corporation, the respondent Joseph Sheldon, heretofore acting as Treasurer of the respondent corporation, having severed his connection with the corporation sometime in the latter part of the year 1952. The addresses of respondents Henry Greenberg and Max Gartner are the same as that of the corporate respondent above set forth, and the address of Joseph Sheldon is No. 810 Pennsylvania Avenue, Brooklyn, New York.

2. Respondents, with the exception of Joseph Sheldon, for several years last past, have been engaged in the manufacture, sale, and distribution of paint brushes, and have caused their said products when sold to be transported from their places of business in the State of New York to purchaser thereof located in the various states of the United States and the District of Columbia. Respondents maintain, and at all times mentioned herein have maintained, a course of trade in the said products among and between the various states of the United States and in the District of Columbia. Respondents' volume of business in said commerce is substantial.

3. Said respondents, with the exception of Joseph Sheldon, (whose connection with Abbey will be the subject of a separate finding here-

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in), during the periods covered hereby, were engaged, and are now engaged, in the manufacture and sale of paint brushes and at all times have been, and are now, in substantial competition with other corporations, individuals, firms, and partnerships in the sale and distribution of like products in commerce, among and between the various states of the United States and the District of Columbia.

4. The word or term "bristle," used in connection with the manufacture of brushes, particularly paint and varnish brushes, indicates and means the strong resilient hairs which grow on the back of the hog or swine. For the manufacture of painters' brushes, no material has been found as acceptable or efficient as the bristles of the hog or swine, which bristles in the great volume of the aggregate, have a split or fork (in trade parlance designated a "flag"), at the apical end of each bristle, thereby enabling a paint brush composed of bristle to retain and spread paint to better advantage and with greater efficiency than a brush composed of any other material or materials. The best quality of bristle is imported. The better quality of bristles obtained from hogs slaughtered in the United States are also used in the industry. Notwithstanding the great variety of possible materials that could be employed in the manufacture of brushes, a large percentage of all brushes are made from the bristles of the hog or swine.

All swine bristle from whatever location of the world have certain identifiable characteristics in common such as taper, flag ends, scales, elasticity, spring, etc., differing only in certain qualitative particulars which make bristles from certain localities more desirable than other bristles for specified uses and purposes.

Among the better known, but cheaper and inferior products, used as adulterants or substitutes in the manufacture of paint and varnish brushes, are horsehair and wood or vegetable fibers, the latter two ingredients not being here involved, the evidence showing that the adulterant made use of in respondents' brushes being horsehair. From the standpoint of excellence, quality, effectiveness and efficiency, horsehair is decidedly inferior to the higher priced genuine bristle, for which reason there is a decided preference on the part of members of the consuming public for paint and varnish brushes that are made of genuine bristle, unadulterated with horsehair.

5. In the course and conduct of their aforesaid business, and for the purpose of inducing the purchase of their said brushes, respondents have caused their handles of certain of said brushes to be stamped, marked or labeled with the words "Pure Bristle," the use of which words constitutes a representation to the public that the

material of which said brushes is composed consists entirely of the bristle of the hog or swine.

6. It is found as a fact that during the course of the manufacture of their said products respondents have sold and introduced in commerce certain of their brush products which are not in fact composed entirely of the bristle of swine but, on the contrary, contain varying quantities or percentages of horsehair, this practice leading to the production of an inferior product and constituting a direct misrepresentation in a material aspect.

7. In the matter of fiber identification, and particularly to differentiate between bristle and horsehair, there are two basic methods pursued:

(1) The "eye and feel," of "see and feel," tests commonly used in the trade, based primarily on visual appraisal for characteristics of taper, flag and color, coupled with tactile examination for spring, texture and ability of fibers to regain their original position after having been subjected to stress.

This method was availed of by witnesses on both sides of the controversy.

(2) The "pattern of pigmentation theory" test in the use of which the fiber or filament is cross-sectioned, by means of a slicing machine called a microtome, to thicknesses of 30 or 40 microns and then, after mounting on slides, are subjected to microscopic examination at 100 diameters for pigment pattern, the distinction between true bristle and horsehair being determined by the fact that in bristle the granules of pigment are concentrated in the medulla or center and diminish in density as they approach the periphery or outside skin of the fiber, whereas in horsehair there is little if any pigment granules appearing in the center, such pigmentation being mainly concentrated at the periphery or outside sheath of the hair.

This method was made use of by two witnesses testifying at the instance of the Commission and was not availed of by any witnesses for the respondents. Respondents' witnesses did, however, in two instances make use of the microscope but solely for what might be described as a "gross" examination for taper, flag, cellular structure and similarity or dissimilarity with various other strands or fibers.

In considering the weight to be accorded the testimony of the respective witnesses, the maxim *testes ponderantur, non numerantur* has been observed, which Black defines as:

Witnesses are weighed, not numbered. In case of conflict the truth is to be sought by weighing the credibility as well as the capability of the respective witnesses—not by the mere counting of noses on one side or the other.

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In order to maintain the issue on its part joined, the Commission produced certain witnesses concerning operations of the corporate respondent and certain expert witnesses on fiber identification:

8. The respondent Gartner testified that the Abbey Corporation is the owner of a manufacturing plant, but at the time of testifying (October 1955) is not in production but is in process of liquidation; that when Abbey was in production it had an agitating machine used in the manufacturing process, which machine was for the express purpose of mixing or blending fibers; that when Abbey was in production it, in fact, manufactured and produced brushes composed of 100% bristle, and this without difficulty, despite the fact that respondents have earnestly urged the practical impossibility of segregating foreign or adulterating matter found in its imported raw bristle material; that Abbey likewise produced brushes composed of mixed fibers of bristle and horsehair, and in so doing the mixture was under strict control, and respondents were aware at all times, from the beginning to the end of the process, of the percentages of the various fibers entering into and composing the mix batch; that respecting their bristle brushes of 100% pig bristles, such were labeled "100% Pure Bristle" or "All Pure Bristle"; that blended brushes were marked, on the handles thereof, so as to reveal the percentages of constituent fibers, such as "70% bristle, 30% horsehair" or "55% bristle and 45% horsehair," and that respondent, Gartner, who was in active charge of the manufacturing functions, did not find or consider it a hardship thus to label his products; that had a mixture containing 90% bristle and 10% horsehair been used it would have been labeled "90% bristle and 10% horsehair," although respondents never produced any such mixture which was actually labeled so as to disclose this information; that on a few occasions respondents had produced brushes labeled as "75% bristle, 25% horsehair," and it was quite general for them to produce brushes marked "50% bristle and 50% horsehair," the latter legend representing the true fiber admixture; that for the three year period 1950, 1951, and 1952, Abbey brush production volume consisted, respectively, of 70% pure bristle brushes and 30% mixed fiber, and were so marked, and further, that such has been the custom of Abbey throughout the years.

The record is devoid of any evidence that respondents mark any mixes other than with the "50%—50%" or "75%—25%" designations (the latter being produced by Abbey on special or custom orders only), which would give credence to the Commission's contention that the respondents considered no mixture of their own products,

other than "50—50", of any significance or worthy or necessary to be marked so as to adequately inform the purchasers thereof of the true fiber content.

9. Respondent Henry Greenberg, testifying at the instance of the Commission, said he is President of Abbey Corporation; that there are members of the public who prefer to buy paint brushes composed of pure bristle; that Abbey's production consisted of approximately 5% of brushes composed of horsehair and bristles and 95% of bristle, whereas Gartner, a respondent, Vice President of Abbey, testified that Abbey's output consists of approximately 30% of brushes composed of horsehair and bristle and 70% of pure bristle; that respondent Sheldon had charge of the sales division of Abbey and respondent, Gartner, has charge of purchasing materials that go into the manufactured product.

10. The Commission introduced a witness who, after stating his educational and scientific qualifications and background, testified that he has been an employee of the United States Bureau of Standards since October of 1940, and since 1946, in the Testing and Specifications Section of the Organic and Fiber Materials Division of the Bureau; that testing work is done in the microbiological laboratory, testing and reporting upon the fiber contents of from 70 to 100 brushes a year, and in the identification of these fibers emphasis is heavily laid on the microscopic examination of fiber cross sections, such method being, in the opinion of the witness, the only dependable criterion. In preparing the fibers for examination they are treated in order to soften them, and are then mounted in a hand microtome and sliced into sections approximately 30 or 40 microns³ in thickness. After preparation the specimens are subjected to examination under a microscope at about 100 diameters. In a hog bristle the pigment granules are concentrated in the center and diminish as they approach the periphery of the fiber; that in differentiating the true bristle from horsehair, it is found that horsehair, in contradistinction to bristle, has a very low concentration, if any, of pigment in the center and that the pigment is concentrated mainly at the periphery of the fiber, the foregoing being an oversimplified statement of the method pursued for microscopical identification of fibers. Also, in arriving at a decision, other matters are considered such as the dyeing of fibers, a preliminary gross or over-all examination of the brush, minute inspection for signs of synthetic flagging indicative of horsehair, and for the gross appearance of horsehair. This gross examination is useful because, if a brush

³A micron is one one-thousandths of one millimeter or, expressed decimally in inches is 0.00003937 of one inch, or fractionally 1/24,500 inch.

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has a considerable amount of horsehair, such is easily determinable by the lack of individual fiber taper, the thickness of the fiber, the brush temper or ability to resume the individual fiber positions after having been subjected to stress, as well also other matters, but the main and significant element of the test is the pigment distribution in a fiber cross section; that hog bristle is generally always characterized by a noticeable taper, and this is not only evident to the naked eye, but is even more accurately determinable by the cross section, e.g., a cross section near the tip of the bristle compared with a cross section of the same bristle removed from near the base thereof would disclose a considerable increase in cross-sectional diameter in the latter.

Horsehair does not have a taper like, or comparable to, hog bristle, and the absence of taper may be determined by gross examination and may be made more definite by microscopic observation; that while it is not common experience, instances have been found where the flag of the bristle has been artificially simulated in horsehair although never found in horsehair in its natural state.

In some instances the true hog bristles will not evidence a flag because in many instances the flags may be worn off by the hog, and in other instances, during the manufacturing process, the sorting may inadvertently turn the flag end of the bristle down and the basal end up so that the flag would be imbedded in the mastic or vulcanized heel of the brush and thus not evident in the finished product, hence the lack of "flag" is not proof positive that the fiber is not a true bristle, however, the presence of a flag produced by nature is proof positive of bristle identification. It is in instances of doubt where the pigmentation pattern, as above outlined, proves its true value.

The testimony of this witness went into great detail on the origin of the "pattern of pigmentation" test, the methods of procedure and his reasons for faith in the accuracy of the tests. Supplementing and supporting his testimony are many photographic exhibits of the apparatus used in pursuing the tests and a detailed explanation of the steps availed of in the use of the apparatus. Also, through the witness there were introduced in evidence some forty-six photomicrographs, some of which were utilized to demonstrate theory and many of which were actually of fibers removed from respondents' brushes. From these photomicrographs witness testified with great particularity as to bristle and horsehair identification, pointing out the differing pigment patterns and the bases for his conclusions, as to all of which testimony thorough cross-examination

was had; that the pigmentation tests performed on either white or light gray, or any other lighter shades of bristles, would be inadequate, but in this connection the fact is that all bristles tested and considered as a basis for these findings, are black in color. Furthermore, had the bristles been dyed black from an original lighter shade or color, such dyeing would have been disclosed under the microscope because the pigmentation in the natural bristle is in granule form, while the dye would evidence itself as a morpious mass or wave of color and easily distinguishable as such.

The witness has heard of the "eye and feel" test but is not competent to perform it and has relied on his own tests as above outlined, and principally on the "pattern of pigmentation" procedure.

He concurred that microscopic tests would prove impracticable and time consuming if attempted in the trade, and also would require a specialized personnel; that he does not urge nor advocate use of such in the trade; that he used the same as a laboratory procedure only, and solely because he wished to accurately ascertain the true origin of the fiber, and to him the method he pursued is the most accurate method known.

The witness thereupon gave the results of his tests performed on samples extracted from four of respondents' paint brushes as follows:

Rawlett's—Abbey Exhibit No. 1.

All hog bristle

Gaines—Abbey Exhibit No. 1.

Hog bristle with significant amounts of dyed and undyed horsehair

Gaines—Abbey Exhibit No. 2.

Hog bristle with significant amounts of dyed and undyed horsehair

Gaines—Abbey Exhibit No. 3.

Hog bristle with small amounts of dyed and undyed horsehair

(Examiner's Note: The foregoing exhibits are respectively Commission's Exhibit Nos. 1, 2, 3, and 4.)

As a result of his findings he was of the opinion that Commission's Exhibits Nos. 2 and 3 contained between 10 and 20 percent of horsehair, while Commission's Exhibit No. 4 contained less than 5 percent of horsehair.

11. Another Commission witness is an employee of the United States Department of Agriculture in the capacity of an animal fiber technologist, so employed since 1948; that the Agency scientifically tests paint brushes to determine their fiber content; that witness conducts all tests and performs all work in connection therewith; that during her tenure she had opportunity, over a period of three years, to pursue her work in collaboration with one Dr. John I. Hardy, who, in addition to being an expert in the field

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of animal fiber identification, was also the inventor of the device known as the Hardy Cross Sectioning Device, (used by the witness Newman and described as the "Hardy Microtome").

Witness tested samples extracted from all of respondents' brushes here in evidence, using the cross-sectional method to determine pigmentation pattern with the aid of the microscope; that this method of fiber identification is officially recognized by the Government agency aforesaid as being accurate and dependable for the purpose employed and that she knows of no other equal or more reliable or efficient method.

After delineating the tests in detail, she gave as her opinion that brush, Commission's Exhibit No. 1, was composed of 100% pure bristle; brush, Commission's Exhibit No. 2, was composed of 13% horsehair and 87% hog bristle; brush, Commission's Exhibit No. 3, was composed of 36% horsehair and 64% hog bristle; and brush, Commission's Exhibit No. 4, was composed of 25% horsehair and 75% hog bristle.

12. Another witness testifying at the instance of the Commission, conducts an independent research laboratory at Lemont, Pennsylvania, under the name Nittany Laboratory, established in 1951 in conjunction with her late husband, Dr. John I. Hardy, to carry on research and testing of fibers and fibrous materials. After testifying at length concerning her professional qualifications and educational background, experience and training in her chosen field, the Hearing Examiner finds her qualified as an expert to testify herein on the subject of fiber identification. Among her qualifications she cited three years of employment with the National Bureau of Standards in the Division of Organic and Fibrous Materials, whose functions were to test materials containing fibers against United States Government specifications, including therein fibers from paint brushes. Also, the witness has authored or co-authored a number of publications on fiber identification and characteristics, including microscopic procedures, a list of such publications appearing of record herein.

Adverting to her studies seeking the specific identification of fibers contained in the several exhibits of respondents' brushes, witness testified in detail as to laboratory procedures in extracting and preparing fiber samples for inspection and subjecting them to visual and microscopic examination (the latter not by the pigment pattern method); appraised the general appearance as to surface texture; examined for taper at both apical and basal extremities; the presence or absence in individual fibers of curvature or body contour

(this being an indicium of true bristle), and the presence of flag at the tip ends; that prior to making specific evaluation of any fiber she secured authentic samples of bristles and of horsehair from an independent known source for purposes of comparison.

Witness also made use of the "scale" method of observation which, in its original form encased the fibers between two layers of thermoplastic film after which, by use of pressure and heat to 100 degrees, an impression of surface structure was obtained on the film. That process has since been simplified by use of a liquid which solidifies and gives scale impressions to assist in identification, and this is one of the scientific methods made use of by the witness.

As a result of her tests witness arrived at the following conclusions and findings as to fiber contents of respondents' brushes:

As to brush, Commission's Exhibit No. 2: 95% bristle and 5% horsehair.

As to brush, Commission's Exhibit No. 3: 60% bristle and 40% horsehair.

As to brush, Commission's Exhibit No. 4: 70% bristle and 30% horsehair.

Each of the foregoing sets of figures is subject to a tolerance of plus or minus 10%, such being an accepted tolerance recognized by the National Bureau of Standards in difficult analyses, such as this. The "difficulty" was explained as being due to the large aggregate number of fibers in the manufactured brush and the impossibility of arriving at an absolutely accurate percentage of the respective fibers by projecting or extrapolating to the whole mass the percentage figures arrived at by examination of a representative portion of the aggregate.

Witness' testimony is supplemented by a formal report of record herein.

13. Another witness called by the Commission uses the "eye and feel" method of bristle identification; is now the vice president of a brush manufacturing firm, and has been actively engaged in the brush business for fifty-seven years; has given many talks to interested organizations on the subject of bristles and brushes, and has had some articles on the subject appear in railroad, meat packing, and trade journals in this country and in England; has, upon occasion, prepared standard samples and specifications for the United States Government, and has served the Government as a consultant in its stockpile bristle program; also served the National Production Authority and the War Production Board as industry advisory committeeman on the subjects of bristles and brushes; a member of the

Bristle Committee of the American Brush Manufacturers Association, and has served for twenty years as chairman of the Bristle Specification Committee of that organization.

Witness has been using the "eye and feel" test on bristles for over fifty years; is personally proficient therein and regards same as an adequate test for practical purposes in the trade; by this test he can examine a brush and determine its bristle content with reasonable accuracy. Upon being shown brush, Commission's Exhibit No. 1, gave as his opinion that same is an "all bristle" brush; that referring to brush, Commission's Exhibit No. 2, he testified same contains horsehair in a substantial amount and sufficient to adversely affect the true value of the brush; that referring to brush, Commission's Exhibit No. 3, testified that same contains horsehair in sufficient volume to adversely affect the value and substantial worth of the brush; that referring to brush, Commission's Exhibit No. 4, testified same contains horsehair in an amount sufficient to affect its use and value as a brush.

Testifying generally, witness said that the "eye and feel" test is the only test necessary for a bristle importer or a brush manufacturer to enable distinguishing between pig bristle and horsehair; that bristle importations into this country from China, or elsewhere, do not have horsehair intermingled with the bristles; that there is no manner in which horse hair can become mixed with bristle in the brush manufacturing process except by human intention and design, and that the trade does not recognize that there are elements of impurities, including horsehair, in all stocks, shipments or importations of bristle, and that the only reason a manufacturer would add horsehair and stamp a brush as containing "pure bristle" would be "to make more profit." It is not difficult in the brush manufacturing process to avoid the intrusion of adulterants, such as horsehair; that it is not difficult or impossible from a practical commercial standpoint to manufacture a 100% pure bristle content brush, and that he manufactures such, as well also brushes of the mixed fiber variety; that when manufacturing a brush labeled "All Bristle," but which is composed partly of horsehair, the witness, as an expert, would expect to find most of the horsehair in the center of the brush, the adulterant being thus covered up or hidden by a "casing" of genuine bristle preventing the horsehair, or short hairs used as a filler, from working to the outside and being apparent upon inspection; that it is customary in the trade for importers and brush manufacturers to rely upon the honesty and good faith of their suppliers but, quite independently of this reliance, the importers and manufacturers rely

also upon their independent inspection of each shipment to satisfy themselves they are receiving materials commensurate with the prices paid and the quality ordered.

14. Another witness called by the Commission, has been manager, since 1945, of a New York concern engaged in importing bristles, his company being an agency of a British firm with headquarters in London; that in his managerial capacity he is engaged in conducting the buying and selling operations of the concern, which imports bristles from nearly all countries, as well also horsehair in limited amounts; that prior to his present employment he was engaged in the exporting of bristles from China, having spent approximately eight years there, so that his total experience with bristles extends over a period of twenty years; that witness has never known of horsehair being mingled with bristles when the latter are imported or purchased as such, and that the trade, as such, does not recognize that there is an element of impurity, including horsehair, in all stocks or shipments of bristle; that in the opinion of the witness there is but one way in which horsehair can be mixed with bristle, and that is by human intention and design, and that in the purchase of bristle and in the manufacture of brushes it is not difficult to avoid the intrusion of horsehair.

15. Another witness called by the Commission, has for the past nine years been employed by a firm manufacturing paint brushes, his duties consisting of buying bristles, horsehair, nylon, and ox hair, and supervising the batch formulas of fibers for the manufacturing processes, this latter duty consisting of specifying the blend of materials, lengths of bristles, textures, etc., in order to arrive at the desired mixture for the brushes; that prior to his present employment he was for 25 years with another firm, likewise in the business of importing bristles, so that his total experience with bristles amounts to approximately 34 years, although he emphasized that at present he is in the "brush business," in contradistinction to the "bristle business"; that it has been his constant endeavor throughout the years to contact users of paint brushes and elicit their preferences so that he could be alert and ascertain their likes and dislikes concerning various types of brushes; that his experience convinces him that the purchaser of a brush marked "Pure Bristle" expects to receive a brush composed of 100% pig bristle, and that there is very definitely a demand and preference on the part of the consumer for all-bristle brushes.

This witness is a user of the "see and feel" method of bristle identification and considers this method adequate, from a practical

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standpoint, for the trade; that he claims to be an expert in this method and uses it exclusively in his own business at all times, and can examine a brush in this manner and determine its fiber content with reasonable accuracy.

Upon having presented to him for inspection the brushes in issue in this matter, he gave as his opinion that brush, Commission's Exhibit No. 1, is composed of all bristle; that brush, Commission's Exhibit No. 2, contains a proportion of horsehair of approximately 10% and that this amount of horsehair is sufficient to adversely affect the quality and value of the brush; that with regard to brush, Commission's Exhibit No. 3, there is a sufficient content of horsehair to adversely affect its value and use as a brush and, with regard to brush, Commission's Exhibit No. 4, there is likewise present a sufficient amount of horsehair to adversely affect its value and quality as a brush; that in his entire experience, witness recalls but one instance where, in an importation of bristles from China, or elsewhere, there was present horsehair or other adulterating material, and in this particular instance, to the best of his recollection, the quantity of horsehair amounted to between two and three percent. The witness considered even this adulteration sufficient to reject the shipment for use in the production of all-bristle brushes and made use of same in brushes of the admittedly mixed type; that the term "pure bristle," in the trade, means brushes composed of 100% bristle of the pig or hog, and that the presence of horsehair definitely and substantially adversely affects such brushes, both price-wise and use-wise, in comparison with an all-bristle brush; that the only reason a manufacturer would include horsehair in a brush stamped "pure bristle" is "to cheapen the brush"; that the manufacturing concern with which the witness is connected produces brushes containing horsehair but does not cause such brushes to be stamped as "Pure Bristle," but on the contrary with the percentages of horsehair and bristle; that it is not difficult to produce a brush composed of pure bristle and, in fact, respondents' firm is doing so every day and experiences no difficulty in avoiding the intrusion of horsehair; that where horsehair is present in brushes marked "all bristle" he would, as an expert, look for the horsehair to be inserted in the center of the brush "because that is the place where it is most easily hidden."

Cross-examination of this witness went extensively into the comparative prices of horsehair and bristle, which this examiner believes to be without the scope of the issue here involved and hence no significance is attached thereto. The cross-examination likewise

developed that witness' firm is a manufacturing competitor of respondent Abbey, but the examiner, who had ample opportunity to observe the witness on the stand, was satisfied with his truthfulness and straight-forwardness, as also with his expert qualifications to testify, and accepts the same, being of opinion, and so finding, that the fact of competition did not result in, or induce, coloration of testimony.

16. When the respondents undertook to present their side of the matter they were permitted, by the then acting examiner, despite the narrowness of the issue, to introduce a plethora of testimony concerning bristles from various parts of the world, thus unduly encumbering the record with extraneous matters such as quality, characteristics, prices of bristles in the world market, the relative brittleness, resilience, and temper of bristles from warm and cold climates, the various types of bristles, and a number of collateral matters not truly at issue, thus taking the record on an unnecessary junket to such far away places as Pekin, Tientsin, Chungking, Hankow, Yunnan, Calcutta, Persia (Iran), Manchuria, South America, Korea, Asia, Bulgaria, Philippines, Poland, Russia, the Baltic States, Siberia, Albania, France, Canada, Austria, Yugoslavia, Roumania, and Hungary, and in doing so unnecessarily consumed hundreds of pages of transcript. For the reasons hereinbefore cited, testimony of this type, not bearing upon the true issue and not having been in any wise justified or connected up with the issue by the respondents, will be accorded no weight in arriving at a decision.

The respondents, to maintain the issues on their part joined, offered testimony as follows:

17. A witness who is by profession a consultant to the fur and hair industries, having engaged in this general line a total of 45 years; has no formal degrees in chemistry, his professional background in the matter of fiber identification having been gained by experience; has written a number of papers on this and related subjects; is on the Board of Technical Association of the Fur Industry and has delivered lectures on the recognition of hair under the microscope as well also other methods by which identification may be accomplished; that he has testified on many occasions without compensation, for various Government agencies, including this Commission, and that he is "applauded" as "a leading authority on the subject [fur] in the country," and is testifying here without compensation "just for pleasure"; that he maintains a fully equipped laboratory for, among other things, fiber identification; that he was furnished with fiber specimens removed from brushes of the re-

spondents, Commission's Exhibits 2, 3, and 4, and prepared them by accepted laboratory procedure for cross-sectional examination under the microscope; that in doing so, witness found that in slicing the fibers with the microtome at approximately 15 microns the fibers shattered, and witness professed his inability to secure satisfactory photomicrographs, implying thereby and by related testimony, that it would be impossible for anyone to arrive at any definite conclusion as to identification of these fibers by this method despite the fact that Commission's witness Newman produced and explained many cross-sectional photomicrographs, which are of record. This being so, the microscopic cross-sectional examinations performed by this witness, as such, have no weight in disproving the actual ability and success of Newman to procure cross sections to demonstrate his, Newman's, theory of pigment pattern identification. In truth, this witness is not a believer in this method of fiber identification of filaments after such have undergone the manufacturing process, as here. Witness contends that the best method for bristle determination is that used in the trade, being the "hand and see" test, and to examine for other bristle characteristics such as flag, taper, temper, and resilience.

The witness also attacked the claimed ability of the Commission's witnesses to make use of pigment pattern identification in dyed bristles, stating that the dyestuff masked the pigment content.⁴ This witness was unable to obtain any helpful or definite results from his cross-sectional examination which would assist him in making fiber identification possible.

Witness produced a number of photomicrographs in negative form which he testified were samples taken at random from respondents' three brushes and that all disclosed the presence of natural flags, or other indicia of bristle; that the examination by microscope was supplemented by gross visual inspection of all the other fibers in the samples, whether microscopically photographed or not; that witness concluded, and gave as his opinion, that all such were bristle and that he found nothing in any of his examinations to indicate that respondents' products were other than pure bristle.

18. Another witness produced by respondents is a chemist associated with a commercial laboratory (as to which concern see testimony of witness next following), as an analytical chemist; witness has had very limited experience in the field of fiber identification;

⁴ In this matter Commission's Exhibits 2, 3, and 4, are dyed fibers, and witness Newman testified affirmatively that irrespective of the dyeing process, the dyestuff appeared in a morpous or a wave form, while the natural pigment retained its granular characteristics and was unaffected by the dye.

that he examined certain strands or fibers being identified as portions of respondents' brushes, Commission's Exhibits Nos. 2, 3, and 4; that the examination was performed microscopically, one hair at a time, longitudinally (not by cross-sectioning), placing particular emphasis on pigment distribution and cell structure; that from Exhibit No. 2 he examined 200 fibers, 197 of which showed identical structure, but that the three variants had a different pigment distribution, being reddish brown in color; that from Exhibit No. 3 he examined 173 fibers of which 171 were of identical pattern, two varying in cell structure and pigment distribution; that from Exhibit No. 4 he examined 148 fibers and found all to be identical in pigment distribution and cell structure. From his examination witness was unable to arrive at any conclusion as to the specific identification of *any* of the fibers tested, confining his testimony to similarity of fiber characteristics as above stated and that he has no opinion as to what the fibers are.

Cross-examination developed this was the first experience of witness in making tests for fiber identification; that no microtome or apparatus or instrument, other than a microscope, was used; is uninformed as to the portions of the brushes from which the fibers he examined had been extracted; that witness withdrew the number of fibers, concerning which he testified, from a greater quantity of fibers submitted to him from each of the three exhibits but, aside from those he examined and testified to, he made no microscopical examination of the others; that "[He] is not an expert on bristles—I wouldn't know [one] if I saw one," and that his test was solely for, and confined to, classification of pigment and structural differences, if any.

19. Another respondents' witness is President of the commercial laboratory mentioned in Paragraph 18 above, which employs the preceding witness on a part time basis when needed; that the laboratory had been set up by witness about three months prior to testifying and this is the first test on bristle made by it; witness has had 41 years' experience in metallurgy and steel but is not personally a specialist on fibers, hence the employment by the laboratory of the preceding witness.

20. Respondents introduced four other witnesses having varied experience in the bristle trade extending over a period of from 20 to 30 years as dealers in bristle and dressers thereof; that all employ the "eye and feel" method of fiber identification and consider it to be accurate and adequate for use in the trade; that some had heard of the "pigment pattern" identification process but that same is not used in the trade, nor is it necessary.

Two of these witnesses are suppliers of bristle (one of them also a supplier of horsehair), to Abbey Brush Corporation, such purchases as to one witness ranging from \$20,000 to \$30,000 a year and, as to the other, from \$20,000 to \$70,000 a year.

All four witnesses expressed their opinion to be that all of the fibers exhibited to him, and which were extracted from respondents' brushes here in evidence, are in fact true bristle.

21. It is found, as a fact, that respondents have caused their paint and varnish brushes to be labeled "Pure Bristle," notwithstanding the same have been substantially and significantly adulterated by means of the use of horsehair, and this finding is based upon consideration of the entire record, including the testimony of the specific witnesses above epitomized, and that the charges have been sustained by, and in accordance with, the reliable, probative and substantial evidence of record.

RESPONDENTS' REQUEST FOR PROPOSED
FINDINGS OF FACT

During the course of the proceedings the respondents tendered much testimony and evidence on various points which they conceived to be material to the defense of this action, much of which testimony, because of the strict limitation of the sole issue involved, hereinbefore indicated, was and is, in the view of this Examiner, immaterial to the issues and incompetent to establish a defense thereto.

Nevertheless, the respondents under their theory of the defense, as well also the testimony actually offered in defense, obviously attached great importance to the numerous requests they have made for proposed findings and, many of their requests having been established as facts of record, they are entitled to recognition of those facts and findings thereof at the hands of this Examiner, and this is now done in order that the respondents may have the benefit thereof for such purpose as they may be hereafter enabled to urge by brief or argument.

Certain of the findings of facts requested by the respondents (aside from the first four thereof which are jurisdictional and have been admitted), are hereby found to be established of record and are set forth as follows:

Respondents use bristle in the manufacture of their brushes, and bristle is the hair of swine. (It will be noted that respondents cite in support of the definition of the word "bristle," the Trade Practice Rules for the Paint and Varnish Brush Industry); bristle is obtained

from all parts of the world and is purchased by respondents from importers, jobbers, and brokers; that bristle from the back of the swine is the most desirable, and has a natural flag, whereas bristle from the tail or belly of the swine, as well also horsehair, have no apparent taper, nor do they have a natural flag.

Bristle is collected by dealers in the various parts of the world, primarily from individual farmers who grow other animals as well as swine; that bristle is received by respondents from their suppliers in small packages of which respondents make a spot check for quality using therefor the "eye and feel" examination which is the only method used, and is standard in the trade; that the use of a microscope for examination of bristle is not used in the trade; that in the brush manufacturing process by respondents, the bristle is first cleaned and straightened, and during the process is subjected to both dry and wet heat up to 310° F. and may be subjected to further wet and dry heat treatments during the process; that the application of heat renders the bristle more brittle.

The average annual purchases by the respondents of bristle amount to approximately \$250,000 and of horsehair \$4,000 to \$5,000; that in some instances the price of horsehair exceeds that of bristle in the shorter sizes—is about equal in the medium sizes, and in the larger sizes of bristle the price exceeds that of horsehair.

The brushes of respondents which were used to substantiate the charges of the complaint were Commission's Exhibits 2, 3, and 4, all of which were sold by respondents prior to the commencement of the Korean War. No accurate quantitative analysis of fibers can be made. [This finding is granted in this form solely for the reason that no witness who testified in this matter undertook to count, segregate, differentiate, and appraise each and every of the many thousands of hairs, fibers, or bristles comprised in any of the exhibits which, according to the testimony, would be a long, tedious and laborious process, practical results being attainable by analysis of smaller samples, plugs, or swatches.]

There is no scientifically established test, nor one accepted by all experts, to distinguish all types of bristle from all types of horsehair in all cases; that both bristle and horsehair contain pigment and that pigment exists in both types of fibers in the cortex, or outer band thereof, which pigment granules are irregular in some forms and that in some instances both bristle and horsehair may have hollow centers; that the amount of pigment in bristle is dependent upon the diet and locality of the swine and the portion of the body from which it is obtained; that pigment is densest in the medial

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region and sparsest in the apical or tip region and the basal or bottom region of the bristle, and the distribution of such pigment throughout the bristle is irregular, which latter is also true of distribution of pigment in horsehair; ascertainment of the amount or density of pigment in bristle and horsehair can only be made by an examination of a cross section of fiber under a microscope; that the distribution of pigment in bristle does not follow any regular pattern and the identification of pigment by this method would be of no value in the light shades of bristle or horsehair, and the theory of identification based upon the regularity of pigment distribution in bristle and horsehair presents a possibility of error.

CONCLUSIONS

1. Referring to the respondents' proposed finding that the complaint be dismissed as to the individual respondents: This has heretofore been denied but the status of respondent, Sheldon, and the propriety of including him in the order to cease and desist, in view of his severance of relationship with Abbey in 1952, should be examined.

On February 19, 1951, Sheldon contacted one of the expert witnesses for respondents, and assisted in securing his services as an expert to testify in their behalf; that he, Sheldon, had received the envelope containing plugs of bristles extracted from respondents' brushes here in evidence; that the envelope was opened and the contents examined by the person whose services were being sought by respondents as a witness in the presence of the three individual respondents, Sheldon, Gartner and Greenberg; that the solicited witness then and there gave his opinion concerning the fiber contents of the samples before him; that Sheldon later, on the same day, in company with Gartner and Greenberg, called upon another prospective witness and they went through the same procedure as with the first solicited witness, with the same results; that thereafter the envelopes and their contents were introduced in evidence in this proceeding through the instrumentality of Sheldon.

From the foregoing it will be seen, and is so concluded and found as a fact, that the respondent Sheldon actively participated in the defense of these proceedings and presumably did all in his power to assist respondents in their opposition to the complaint, hence it is concluded that, despite the fact he severed his connection with Abbey in 1952, he nevertheless continued that relationship for some two years after issuance of the complaint and participated, as sales manager for Abbey, with the remaining two named individual re-

spondents, in directing, conducting and formulating the policies and acts of the corporate respondent. Hence, because of the lapse of the intervening years, which lapse was occasioned by the vicissitudes of trial, the complaint as to Sheldon should not be dismissed. As a fact the Initial Decision of the original Hearing Examiner, later set aside, was filed herein on August 28, 1951, and it is true that, as of that time, Sheldon was still engaged in the common enterprise and, he said, the lapse of the intervening years is no sufficient reason for dismissal as to him and no assurance to this Commission, acting in the public interest, that respondent Sheldon will not again indulge such practices in the absence of a specific order of prohibition.

2. As an attempted defense respondents claim that in some instances horsehair is more expensive than bristle. This is true "in some instances", but only with reference to "short sizes," that is, two to two-and-one-quarter inches in length. This is because horsehair is of great length in comparison with bristle and much loss in weight ensues when same is cut to short lengths. It is concluded that this contention is unavailing and immaterial to the issue here.

3. Respondents attack certain of Commission's witnesses because of their lack of knowledge of the manufacturing process by which brushes are produced. At least three of respondents' experts are subject to similar criticism, if it may be called such.

On this point it is concluded that a knowledge of the brush making process is not essential in order for one otherwise qualified to express an opinion on fiber identification and, further, that the lack of such knowledge or experience in no wise detracts from the validity or weight to be accorded any testimony given on behalf of either party to the proceeding.

4. Respondents contend that it is almost impossible to produce a pure bristle brush without the intrusion of horsehair. It is concluded that this contention is without merit: First, because Commission Exhibit No. 1 in this matter is a proven 100% pure bristle brush produced by respondents and is a clear refutation of their contentions in this behalf: Second, the testimony of several well informed witnesses that it is not difficult or impossible to produce a 100% pure bristle brush, and this they were doing in the ordinary everyday course of their production processes: Third, the testimony of several witnesses, long in the industry, that the presence of extraneous or foreign fibers among importations of bristle is not, and never has been in their experience, a problem to the industry and: Lastly, the testimony of several witnesses to the effect that horsehair, when found among bristles in the raw, dressed, or manufactured

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state, are there solely by reason of human design and intention and, as one witness expressed it, so as to cheapen the manufactured product and thus to produce a greater profit.

5. It is concluded that respondents' contention that two or three specimens of respondents' brushes are not fairly representative of their entire line, is without merit. The brushes used as exhibits herein were purchased in the open market; all bear the name "Abbey" and all have the legend "Pure Bristle" stamped on the handles thereof. No effort was ever made by respondents to attack the genuineness of these brushes as their products and, as to the sufficiency of the number thereof to represent the line of respondents' brushes, the ruling and reasoning of the Circuit Court in *Northern Feather Works, Inc., v. F.T.C.* (supra, page 8 hereof), would seem to be conclusive.

6. Respondents have consistently contended that in the purchase of bristles they place great dependance upon the good faith and honesty of their suppliers to furnish them pure bristle. It is concluded that the matter of good faith is unavailing as a defense, and that it is the duty of respondents to see to it, at all hazards, by close inspection or careful selection, (they testified that only spot checks were made of large bristle importations or purchases), that their products, offered to the trade or to the public, are as represented. This they have not done, their misrepresentations resulting in injury to the public and to their competitors.

7. Much stress was placed by the respondents, in the examination of their own and opposing witnesses, upon the impracticability, for use in the trade, of microscopical examination of bristles, either by the cross-section pigment pattern method or for taper, flags, surface scale, etc. It is concluded that no weight should be given this line of testimony because, first, no one, so far as this record discloses, ever advocated the adoption of microscopic examination for use by the trade and, second, such examination was conducted by Commission witnesses purely as a scientific procedure for the more certain identification of the fibers involved, much along the lines of fingerprinting, blood analysis, urinalysis and kindred procedures, the results of which are accepted as competent evidence by all the courts in the land in appropriate instances.

8. Respondents have attempted, during the course of the proceedings, to give some color of respectability to the term "commercially pure" as applied to the fiber contents of brushes which have been adulterated or debased by the presence of horsehair or other foreign substances. It is concluded that nothing appearing in this

record gives credence or support to the use of this term and, in fact, based upon the testimony of many witnesses, including that of the respondent Gartner, to the effect that 100% pure bristle brushes are being continually produced, and the further fact that the Rules for the industry heretofore considered make no allowance for tolerances for extraneous fibers, and the specific provisions of Paragraph 5 of the Federal Trade Commission Act prohibiting false and misleading representations, all unite in forcing the inescapable conclusion that there is no such thing as a "commercially pure" bristle brush. A brush "is or it ain't" and there is no middle ground or double standard by which "purity" may be judged, at least in the bristle brush industry. Webster defines the word "pure" as—"Separate from all heterogeneous or extraneous matter; without alloy, stain or taint; clear; unmixed; free from what vitiates, weakens or pollutes." So much for the semantics,—the practical disadvantages in the use of an adulterated brush have been hereinabove pointed out, as well also the injury to the public and the adverse effects upon competition.

9. Much testimony was introduced by the respondents concerning comparative prices of bristle and horsehair in various grades and lengths, the announced object being to sustain the contentions of respondents that it would work to their economic disadvantage to use horsehair as an adulterant. To this type of testimony the Examiner accords no weight or consideration because of the narrowness of the issue herein as above pointed out and, further, that the economic advantages or disadvantages accruing to respondents by their use of horsehair is of no moment under the charges of the complaint.

10. The Federal Trade Commission has jurisdiction over the parties respondent and over the subject matter hereof, and this proceeding is in the public interest.

11. The aforesaid acts and practices of the respondents, as herein found, are all to the prejudice and injury of the public and of respondents' competitors and constitute unfair methods of competition in commerce, and unfair and deceptive acts and practices in commerce within the intent and meaning of the Federal Trade Commission Act.

ORDER

It is ordered, That the respondents, Abbey Brush Corporation, a corporation, and Henry Greenberg, Max Gartner and Joseph Sheldon, individually and as officers of Abbey Brush Corporation, and said respondents' agents, representatives and employees, directly or

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through any corporate or other device, in connection with the offering for sale, sale and distribution in commerce, as "commerce" is defined in the Federal Trade Commission Act, of respondents' paint brushes do forthwith cease and desist from:

1. Using the words "Pure Bristle" or "bristle," or any other word or term of similar import or meaning, either alone or in connection with other words, to designate, describe or refer to any product which is not composed wholly of bristle of the hog or swine: provided, however, that in the case of a product composed in part of bristle and in part of horsehair or other fibers, the word bristle may be used as descriptive of such fiber content if there are used in immediate conjunction therewith, in letters of equal conspicuousness, words truthfully describing, in the order of their predominance, all constituent materials.

2. Representing in any manner that any of respondents' brushes contain bristle in greater quantity than is actually the case.

OPINION OF THE COMMISSION

By KERN, Commissioner:

The respondent, Abbey Brush Corporation, has engaged in the manufacture and interstate sale of paint brushes, and the three individuals additionally joined as parties herein were directing and formulating its policies and also serving as its officers at the time when these proceedings were instituted. It was charged in the complaint issued by the Commission that certain of the brushes stamped by the respondents with the words "Pure Bristle" were not composed entirely of the bristle of swine but, instead, contained horsehair in various quantities. In his initial decision filed at the conclusion of the hearings, the substitute hearing examiner held the allegations of the complaint to be sustained by the record, and that the respondents' misrepresentations relating to the fiber content of their brushes constituted unfair acts and practices in commerce violative of Section 5 of the Federal Trade Commission Act. From that ruling and the order contained in the initial decision requiring their cessation from the aforesaid misrepresentations, the respondents have appealed.

Under the appeal, the initial decision's findings that various of the respondents' brushes stamped as bristle contained significant quantities of horsehair are challenged as unsupported by the evidence and erroneous. Thus, the sole question expressly presented here under the appeal is a question of fact, namely, whether the fiber contents of brushes so stamped and received as exhibits represented bristle exclusively and included no horsehair.

The term "bristle," as understood by the trade and the purchasing public, excludes any hair, fiber or material other than the bristle of swine. Hence, there is no dispute that the term "Pure Bristle" constitutes a representation to the public that the fiber in a brush so designated is composed solely of hog bristle. Bristle growing on the back is particularly resilient and strong and there is marked preference among purchasers for brushes composed of that fiber. For painters' brushes, no material has been found as acceptable as the bristle of swine, which bristles in the great volume of their aggregate have a fork at the apical end. This fork, known as a "flag" in the trade, contributes materially to more efficient spreading of paint. Bristle is produced in commercial quantities in this country, but best quality bristle is imported, and China has been the leading producer of the better grades. The initial decision states that bristles from whatever location of the world have certain identifiable characteristics in common, such as taper, flag, scales, elasticity and spring, differing only in certain qualitative particulars which make bristle from certain localities more desirable than others for specified uses and purposes.

In the interest of clarity in discussing the issues raised under the appeal, brief reference to other evidentiary matters is warranted. Four brushes manufactured and sold by the respondents were introduced as exhibits into the record by counsel supporting the complaint. He subsequently presented the testimony of two witnesses who had inspected and examined those exhibits and were experienced in the manufacture of brushes. For differentiating bristle and horsehair, they used the so-called "eye and feel" or "see and feel" method of examination commonly used in the trade. This essentially involves both visual appraisal for characteristics of taper, flag and color and tactile examination for spring and texture and ability of fibers to regain their original positions after being subjected to stress. On the basis of their examinations, those witnesses expressed views that the fiber in one (Comm. Ex. 1) was composed of bristle, but that the other three brush exhibits contained substantial or significant quantities of horsehair. Counsel also called three fiber technologists who, on the basis of their independently conducted laboratory examinations of representative samples of fibers taken from those brushes, expressed views that one of them (similarly Comm. Ex. 1) was composed solely of bristle, and that the samples taken from the other three contained quantities of horsehair. The conclusions reached by the technologists as a result of laboratory determinations, it is to be noted, were generally in accord with those expressed

by the other witnesses called by counsel supporting the complaint who based their views on their years of trade experience.

On the other hand, however, the respondent, Max Gartner, who was in charge of buying the corporate respondent's bristle and preparing the mixes or blends for its brushes, testified that the brushes were correctly labeled. The testimony introduced by the respondents also included that of witnesses who were dealers in and dressers of bristle. On the basis of their "eye and feel" examinations of fiber samples exhibited to them which had been taken from the brushes received in evidence, they expressed views that those fibers were bristle.

Two of the fiber technologists, who testified in support of the complaint, based their determinations in major part on a so-called "pattern of pigmentation theory." Such fiber differentiations contemplate that, in bristle, the granules of pigment usually are concentrated in the center and diminish in density as they approach the outside skin of the fiber, while the reverse usually holds for horsehair, that is, its pigmentation ordinarily is concentrated at the outside sheath of the hair. The laboratory procedures used in this method of appraisal include cross-sectioning of fibers by means of a device called a microtome, mounting them on slides and their microscopic examination at 100 diameters. Another of the witnesses called by the respondents, a fur and hair consultant and member of the New York Microscopic Society, expressed views that the exhibit brushes contained no horsehair; and he further testified that only unprocessed bristle will give a true picture of cell pigment and that no regular pattern of pigment distribution exists in bristle or in horsehair.

Respondents contend that this testimony, together with the witness' photographic exhibits fully establishes that regularity of pigment distribution is non-existent and that the studies on pigment have no evidentiary weight. The scientist who conducted his examination in a laboratory at the National Bureau of Standards and who testified that he regarded pigment distribution as a reliable index for identifying fibers had stated that pigmentation appears in granule form under the microscope and that dye evidences itself as a morphous mass or wave of color easily distinguished as such. He subsequently presented photomicrographs, some relating to sample hairs from the brushes and others from fibers of known sources, which he regarded as corroborative and persuasive of the validity of the pattern of pigmentation view. In the light thereof, we reject the appeal's contention and hold that such scientific testi-

mony should be accorded due evidentiary value and considered and weighed in connection with all the other evidence on the same issue in the record.

The third technologist called by counsel supporting the complaint who testified concerning her fiber determinations on the respondents' brush materials utilized the laboratory which she conducts for research and testing of fibrous materials. These studies included a "scale" method of observation. In challenging the probative value of her conclusions, respondents direct attention to the views earlier expressed by a witness for the respondents that heat and other procedures used for processing of fibers would change the contours of the fibrous scales. The witness called by counsel supporting the complaint, however, did not confine her determinations to those afforded by the scale method, and her examination also included examinations for other characteristics of bristle.

Respondents also brand as absurd this witness' statement that if a brush were contaminated with horsehair, she would expect to find larger quantities of it among interior hairs of the brush; and the appeal emphasizes in this connection that virtually all manufacturers use mixing machines so that various lengths of fibers and, when used, different types of fibers, are evenly blended and distributed in the mix for use in a scheduled run of brushes. However, the challenged statement of the witness has corroboration in the testimony of certain of the trade witnesses appearing in support of the complaint. Furthermore, it seems reasonable to conclude that the shaping entailed in the art of brush-making usually calls for selective placement or alignment of fibers of varying lengths, particularly if the brush is a "cased" type. Hence, machine blending notwithstanding, it follows that a tendency for concentration of adulterating fibers in a particular brush section would be presented in any case where adulterants were primarily confined to, or preponderated in, one or a few fiber length categories.

Respondents additionally contend that the substitute hearing examiner erred in rejecting certain of their proposed findings, and specific exceptions in those respects are argued in the appeal brief. Among such requested findings were those to the effect that, like horsehair, neither tail nor belly bristle has flag or taper. These contentions have been weighed in the light of other revelant matters of record and we think the hearing examiner's rulings were free of error.

According to the record, it is commercially feasible to process horsehair with a fork which simulates a flag. Because some shat-

tering results, this is easily detected by microscopic examination and also evident to those skilled in the "eye and feel" examination. Unless thus processed, horsehair has no flag. While the great volume of bristle in its aggregate does have the distinctive flag, it likewise is apparent that a significant number of bristles in a given brush may not display the fork. This may result from a variety of causes, including the fact that the flag end may have been bound into the base of the brush or the hog may have worn off some of the flags before his bristle was removed for the market. Although one of the respondents expressed a belief that tail fiber has no flag, he testified only that "sometimes" bristle from the belly lacks flags. The evidence received of record, however, does not support informed determination that fiber from both the tail and belly characteristically lack flag. Moreover, while the presence of an authentic flag was regarded by various witnesses as a reliable index for identifying a fiber as bristle, it is implicit in their testimony that none of the witnesses called by counsel supporting the complaint held the view that absence thereof solely sufficed for a fiber's identification as horsehair.

The only evidence cited by the respondents indicative that both belly and tail hair lack all taper is a statement by one witness to the effect that the size of such bristles remains constant from root to end. However, another witness called by the respondents stated categorically that tapering is peculiar to the bristle and he was guided by this principle in arriving at his conclusions that respondents' brushes contained no horsehair. Furthermore, the testimony clearly indicates that fiber differentiations made by the trade witnesses called by counsel supporting the complaint were attended by careful regard for difficulties inherent in distinguishing between inferior bristle, including the woolly appearing tail or belly fibers sometimes referred to as "flimsies," and horsehair.

Another of respondents' exceptions concerns the rejection of proposed findings to the effect that, prior to institution of these proceedings, the relative prices of horsehair and bristle and labor costs for mixing fibers were such that more expense was entailed in processing brushes blended of bristle and up to 20% horsehair than for producing those of pure bristle in sizes comparable to certain of the brush exhibits. These requested findings were rejected by the hearing officer as immaterial and not controlling to the issues, and we find no error here.

We have carefully considered the evidence submitted by the respondents to the effect that their brushes are composed solely of

bristle, but deem that evidence substantially outweighed by testimony to the contrary which was received in this proceeding. On the basis of their empirical knowledge, two well qualified members of the brush trade testified to the effect that three of the brush exhibits contain significant quantities of horsehair which impair their value, and a fourth exhibit does not contain that fiber. Their conclusions as to the respective brushes are corroborated by the testimony of the three fiber technologists appearing in support of the complaint. It is clear that the views expressed by those scientists were their sincere views; and the faith of each in the reliability of his respective laboratory procedures is obvious from the record. In the circumstances here, we think that this scientific evidence constitutes persuasive support and corroboration for the other evidence received indicative of the presence of significant amounts of horsehair in the respondents' brushes. The contentions of the appeal that hearing examiner erred in failing to dismiss the complaint are rejected.

On February 17, 1953, the Commission granted a motion by counsel supporting the complaint to withdraw his appeal from an initial decision of dismissal filed by the original hearing examiner in this proceeding. The Commission's order additionally vacated and set aside the original initial decision and remanded the case for the reception of additional evidence before a substitute hearing examiner, the services of the original hearing examiner being no longer available to the Commission for the reason that he had retired from Government service. Respondents had opposed the motion to remand and the appeal reaffirms their objections and exceptions to the order of February 17, 1953. That action was directed for the reason that the record as then constituted did not provide an adequate basis for an informed determination of the issues presented. Because respondents have not shown, and apparently do not claim, that they have been in any manner deprived of their rights to full hearing on the charges, these exceptions are deemed without merit.

We also have considered the form of the order to cease and desist which is contained in the initial decision. One of its provisions would make it mandatory for the respondents to stamp, label or tag brushes combining bristle and other fibers with the respective percentages of each of those constituent materials. While not excepted to on these grounds in the appeal, this provision is not responsive to any of the issues raised under the complaint and, in the circumstances here, we think that this provision of the order including the requirement for quantitative identification of constituent fiber

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lacks sound legal basis. On the other hand, we infer from the record that the prestige accorded brushes of pure bristle by purchasers also extends in substantial though lesser measure to brushes only partly composed of bristle and that horsehair brushes, accordingly, are held in lower esteem than those containing blends of bristle and horsehair. It seems reasonable to conclude, therefore, that it is material to purchasers whether the bristle content of mixed fiber brushes is or is not relatively substantial in comparison with other constituents. Hence, even though requirement of a disclosure of percentages of constituent fibers in blended fiber brushes is legally inappropriate, we think a requirement for qualitative disclosure of constituents in the order of predominance has sound legal basis and is warranted in the public interest in situations wherein brushes are represented as containing bristle. Our order which is issuing herewith provides for appropriate modification of the order contained in the initial decision.

Having determined that the findings and conclusions in the initial decision are free from substantial error and that the respondents' exceptions thereto are not well taken, we are denying the appeal. With the order to cease and desist modified in respects noted in the preceding paragraph, our order issuing herewith adopts the initial decision as the decision of the Commission.

FINAL ORDER

This matter having been heard by the Commission upon the appeal of the above-named respondents from the initial decision of the substitute hearing examiner, and upon the briefs filed in support of and in opposition to the appeal; and the Commission having rendered its decision denying the respondents' appeal and directing modification of said initial decision in conformity with the Commission's opinion:

It is ordered, That the following order be, and it hereby is, substituted for the order contained in the initial decision:

It is ordered, That the respondents, Abbey Brush Corporation, a corporation, and Henry Greenberg, Max Gartner and Joseph Sheldon, individually and as officers of Abbey Brush Corporation, and said respondents' agents, representatives and employees, directly or through any corporate or other device, in connection with the offering for sale, sale and distribution in commerce, as "commerce" is defined in the Federal Trade Commission Act, of respondents' paint brushes do forthwith cease and desist from:

1. Using the words "Pure Bristle" or "bristle," or any other word or term of similar import or meaning, either alone or in connection with other words, to designate, describe or refer to any product which is not composed wholly of bristle of the hog or swine: provided, however, that in the case of a product composed in part of bristle and in part of horsehair or other fibers, the word bristle may be used as descriptive of such fiber content if there are used in immediate conjunction therewith, in letters of equal conspicuousness, words truthfully describing, in the order of their predominance, all constituent materials.

2. Representing in any manner that any of respondents' brushes contain bristle in greater quantity than is actually the case.

It is further ordered, That the respondents shall, within sixty (60) days after service upon them of this order, file with the Commission a report, in writing, setting forth in detail the manner and form in which they have complied with the order to cease and desist.

It is further ordered, That the initial decision of the substitute hearing examiner, as modified herein, is hereby adopted as the decision of the Commission.

IN THE MATTER OF
PROPPER MANUFACTURING COMPANY, INC., ET AL.

CONSENT ORDER, ETC., IN REGARD TO THE ALLEGED VIOLATION OF THE
FEDERAL TRADE COMMISSION ACT

Docket 6665. Complaint, Oct. 26, 1956—Decision, Apr. 13, 1957

Consent order requiring an importer of unmarked parts of hypodermic syringes in Long Island City, New York, to cease offering the completed hypodermic syringes assembled therefrom for sale to the purchasing public without disclosing that the barrels and plungers were imported from Japan.

Mr. Kent P. Kratz for the Commission.

Mr. Milton Friedman, of New York, N.Y., for respondents.

INITIAL DECISION BY ABNER E. LIPSCOMB, HEARING EXAMINER

The complaint herein was issued on October 26, 1956, charging Respondents with violation of the provisions of the Federal Trade Commission Act by failure to disclose that essential and material parts of the hypodermic syringes which they assemble and thereafter offer for sale and sell in commerce are of foreign origin, being imported from Japan.

On February 11, 1957, Respondent Seymour Schuman, individually and as President of Respondent Propper Manufacturing Company, Inc., his counsel, and counsel supporting the complaint entered into an Agreement Containing Consent Order To Cease And Desist, which was approved by the Director and the Assistant Director of the Commission's Bureau of Litigation, and thereafter submitted to the Hearing Examiner for consideration.

Respondent Propper Manufacturing Company, Inc., is identified in the agreement as a New York corporation, with its office and principal place of business located at 10-34 44th Drive, Long Island City, New York, and individual Respondent Seymour Schuman as President-Treasurer and sole stockholder of said corporate Respondent, with his office and principal place of business at the same address. Respondent Beatrice Schuman is identified as the wife of Respondent Seymour Schuman, merely a nominal, figurehead Vice-President of the corporate Respondent, and not a stockholder thereof. The agreement, and an affidavit executed by Respondent Seymour Schuman, which is expressly made a part thereof, state that Respondent Beatrice Schuman neither formulates, directs nor controls the policies, acts and practices of the corporate Respondent, and all parties agree that the complaint should be dismissed as to her.