

Syllabus

IN THE MATTER OF

SAMUEL L. COHN, ALSO KNOWN AS PAT CASEY, AND
CHARLES C. COHN, ALSO KNOWN AS CHARLES CAHN,
INDIVIDUALS AND COPARTNERS TRADING AS COLONIAL
ALLOYS COMPANY, COLONIAL STOVE COMPANY AND
BASE PRODUCTS COMPANY, AND EDWARD ENGEL

COMPLAINT, FINDINGS, AND ORDER IN REGARD TO THE ALLEGED VIOLATION
OF SEC. 5 OF AN ACT OF CONGRESS APPROVED SEPT. 26, 1914

Docket 4943. Complaint, Apr. 15, 1943—Decision, Dec. 30, 1944

Where two partners, engaged in the competitive interstate purchase and resale of aluminum base alloys, which they purchased under the trade name "Colonial Stove Company" and, to a very minor extent, under the name "Base Products Company," and sold, after subjecting it assertedly to a secret process, as "Colalloy," and under the trade name "Colonial Alloys Company," making use of various assumed personal names in the conduct of their business, together with a third individual, variously represented as Chief Metallurgist, Chief Engineer, and Director of Engineering for Colonial Alloys Company, who cooperated with them in carrying out the acts and practices below described;

- (a) Misrepresented the history, nature, size and extent of their business, and the physical property owned, used or occupied thereby, and falsely represented themselves as manufacturers, with manufacturing facilities, through using such statements, on letterheads, envelopes, billheads and in other ways, as "COLONIAL ALLOYS COMPANY and Associated Companies Base Products Co. Colonial Stove Co. Since 1851 Colonial Philadelphia Bldg. East Somerset—Trenton Ave. and Martha Streets Philadelphia, Pa., U.S.A. * * * Since 1851 Researchers—Developers—Manufacturers Chemical—Metallurgical—Electro-chemical Processes and Electronics," and through such statements in connection with advertising, advertising depictions and correspondence as "Hundred of Dies and Tools are available to make many sizes of Industrial and Commercial Equipment" "GIANT TABLE-TOPS FABRICATED * * * of 11 gauge No. 93 COLALLOY," "BASE MILL PRICES COLALLOY FLAT STRIPS AND COILS" "* * * it is not in accordance with Company policy, to permit visitors or inspection at the mills" (to the British Air Commission), "Any patterns, jigs, dies, tools or other equipment which we construct for the purchaser will be used in connection with shop equipment and will be used exclusively for the manufacture of material for the purchaser," "A new COLALLOY floor system saved 750 tons of dead-weight and added another quarter century to the life of this bridge. It also saved the taxpayers a million and a half dollars," and others of the same tenor;

The facts being that it was not until about 1936 that exploitation of said secret process, upon the asserted efficacy of which their said business was based, was undertaken, nor until about 1937—following the death of said partners' father who developed a method for treating aluminum in connection with his stove business—that the individuals concerned began to designate aluminum base alloys, said to have been subjected to their combined chemical and electrical treatment or process, by the trade name "Colalloy," and undertook an extensive and elaborate advertising campaign in its behalf, during which period, also, they registered the various assumed

names above set out; their place of business was a three story and basement brick building about 40 feet by 110 feet, of which they used one floor, though not exclusively, in connection with their said aluminum alloy business; a room occasionally referred to as a laboratory contained a few tools, Bunsen burners and containers but no equipment which would warrant its classification as such, while other equipment in a large room consisted of a panel switch board, a band saw and the vat used in treating the aluminum alloy by the secret process; their employees included two or three workmen, in addition to several women employed as office help; such phrases as "Sheet and Tube Division," "Metals Division," etc. were mere window dressing to give a false impression of the size and scope of their business; much of the advertising material used by them in the early phase of their elaborate advertising campaign, including pictures of numerous industrial and engineering installations, was plagiarized in whole or in part from the advertising, technical booklets and other material published by the Aluminum Company of America, in copying which they merely substituted the word "Colalloy" for the words "aluminum" or "alcoa"; and they bought from producers, distributors and users the aluminum-base products already fabricated into the form in which they sold them, had no facilities for producing, fabricating or processing such products other than the so-called secret process above referred to, and the various trade names employed by them represented the single business carried on as herein set out;

- (b) Represented through much advertising material and technical data which they circulated, that in relation to aluminum alloys of comparable composition "Colalloy," by reason of the aforesaid "electronizing" or "Colalloying" process, had increased mechanical and physical characteristics, possessed greater tensile strength and greater yield strength, was susceptible of faster machining, had better formability, higher corrosive resistance, greater durability, and would bend over sharper radii without cracking, and that the strength of aluminum-base alloys sold by them as "colalloy" in excess of the minimum specifications of other Army- and Navy-approved alloys was the result of the aforesaid process;

The facts being there are only two primary producers of aluminum and its alloys in this country, both of which concerns use arbitrary tables of symbols to designate their various alloys and the treatments given them, and symbols adopted by said individuals for their said Colalloy could be correlated with those of one of such two concerns; Army and Navy specifications for aluminum alloys correspond to the producers' guaranteed minimums, the typical properties of alloys described in such specifications being considerably higher than required and representing a margin of safety, on which differential said individuals traded by representing that their Colalloy alloys were about 10% stronger than other Army and Navy approved alloys; and evidence, including tests of the Bureau of Standards and expert opinion evidence of well qualified metallurgists, established that their claimed secret process did not in fact produce any significant effect upon aluminum base alloys; and

- (c) Represented that they could make quicker deliveries of said Colalloy—which they sold at much higher prices than those charged by the actual producers of comparable alloys—than could other sources of supply, through such statements, among others, as "'Colalloy' has favorable delivery situation. Furthermore, until such time as we are heavily booked with back-orders, as are the large present suppliers, we do represent a relatively fast source of supply on 'Colalloy' for Defense 'A' ratings * * *. 'Colalloy' deliveries represent a favorable consideration to take advantage of, during these unusual times. Delayed or broken delivery schedules result in added costs in doing business or economic losses * * *"; and through individual promises in particular cases;

The facts being that at the time such representations and promises of early delivery were made, said individuals well knew that they could not make earlier deliveries than the primary producers, and in fact could not make deliveries as promptly because after purchase by them the goods were shipped by the primary producer to their place of business in Philadelphia and thereafter re-shipped by them to their customers;

With the result that a number of the manufacturers who were producing materials for the War and Navy Departments, to whom time was of urgent importance, and with whom aluminum, a critical war material, was in heavy demand, were induced to place orders with said individuals for Colalloy, and as a consequence of said promises of early delivery which were not fulfilled, were caused unnecessary delays and difficulties;

Capacity, tendency and effect of which false and misleading statements and implications were to mislead and deceive members of the purchasing public into the erroneous belief that such representations were true and to cause a substantial portion of the purchasing public to purchase Colalloy because of such mistaken beliefs, whereby trade in commerce was unfairly diverted to them from their competitors, to the injury of said competitors and of the public:

Held, That such acts and practices, under the circumstances set forth, were all to the prejudice of the public and competitors, and constituted unfair methods of competition in commerce and unfair and deceptive acts or practices therein.

As respects the question whether certain aluminum alloys, sold at higher prices on the basis of their asserted superior qualities as a result of having been subjected to the sellers' secret process, did in fact have such qualities, there was evidence—aside from tests by the Bureau of Standards, and expert opinion evidence of qualified mineralogists which established that the process produced no significant effect upon the aluminum base alloys involved, which the sellers necessarily bought from the only primary sources thereof—such as the sellers' instructions to such sources not to stencil or otherwise mark the boxes in which products were shipped or mark the products themselves or place inspection slips therein, the trifling purchases of chemicals made by said sellers, and the amount of electric current consumed by them for power, which tended to show that they did not subject all the alloys which they sold as "Colalloy" to the so-called secret process at all.

Before *Mr. John P. Bramhall*, trial examiner.

Mr. Daniel J. Murphy for the Commission.

Shapiro & Shapiro, of Philadelphia, Pa., for respondents.

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act, and by virtue of the authority vested in it by said act, the Federal Trade Commission, having reason to believe that Samuel L. Cohn, also known as Pat Casey, and Charles C. Cohn, also known as Charles Cahn, individuals and copartners, trading as Colonial Alloys Co., Colonial Stove Co., and Base Products Co., and Edward Engel, an individual, have violated the provisions of the said act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint, stating its charges in that respect as follows:

PARAGRAPH 1. Respondents, Samuel L. Cohn, also known as Pat Casey, and Charles C. Cohn, also known as Charles Cahn, are individuals and co-partners, trading under the fictitious names of Colonial Alloys Co., Colonial Stove Co. and Base Products Co., with their place of business located at 2154 East Somerset Street, Philadelphia, Pa. Respondent, Samuel L. Cohn, also known as Pat Casey, resides at 5239 Lebanon Ave., Philadelphia, Pa., and respondent, Charles Cohn, also known as Charles Cahn, resides at Cheltenham, Pa.

Respondent, Edward Engel, is an individual, and an associate of the above-named respondents with the title of chief engineer and metallurgist of Colonial Alloys Co. Said respondent resides at 133 West Widener Street, Philadelphia, Pa.

PAR. 2. Respondents for more than three years last past have been engaged in purchasing aluminum and aluminum alloys from manufacturers, jobbers and distributors located in the State of Pennsylvania and in other States of the United States and which products so purchased were shipped from points in the State of Pennsylvania and such other States to the respondents' place of business in Philadelphia, Pa., where such products, after being subjected to a so-called "electron-izing" treatment or process, were sold and distributed by the respondents under the trade name "Colalloy" in commerce among and between the various States of the United States and in the District of Columbia. Respondents now cause, and for more than three years last past have caused, Colalloy, when sold by them, to be transported from their place of business in Philadelphia, Pa., to the purchasers thereof, some located in said State and others located in the other States of the United States and in the District of Columbia, and there is now, and has been for more than three years last past, a constant current of trade and commerce conducted by said respondents in Colalloy between and among the various States of the United States and the District of Columbia. Respondents in the course and conduct of their business as aforesaid are in competition with other individuals and with partnerships and corporations engaged in the sale and distribution of aluminum and aluminum alloys in commerce between and among the several States of the United States and in the District of Columbia. Among said competitors are many who do not in any manner misrepresent their business status or the nature, quality or characteristics of their products.

PAR. 3. Respondents represent that Colalloy—the Rust-Proof Lightweight Stainless Metal—is made in all forms, sizes and gauges of seamless pipe and tubing—fittings—valves—sheets—strips—circles—plates—floor plates—flats—coils—bars—angles—shapes—extrusions—corrugated roofing, siding and accessories—rods—wires—nails—washers—bolts—rivets and ingot.

PAR. 4. Colalloy is in reality aluminum and aluminum alloys, critical war materials, which respondents have purchased from recognized fabricators or jobbers or distributors thereof and caused to be delivered at their place of business in Philadelphia, Pa., where such products are subjected by the respondents to a so-called electron-izing treatment and then such products are sold and distributed by respondents under the trade name "Colalloy." Respondents' electron-izing treatment merely consists of placing aluminum and its alloys in a chemical bath through which an electric current is then passed; said treatment takes from three to nine minutes.

PAR. 5. In the course and conduct of their business, described in paragraph 2 hereof, and for the purpose of aiding and promoting the sale, by them, of Colalloy in the commerce aforesaid, respondents have disseminated and caused to be disseminated, by the United States mails, advertisements and other material in which they have represented and still represent, directly and by implication that Colalloy, because of such electronizing process or treatment, in comparison with aluminum alloys of a comparable composition has (a) increased mechanical and physical characteristics, (b) greater tensile strength, (c) greater yield strength, (d) faster machining ability, (e) better formability, (f) higher corrosive resistance, (g) greater durability, and (h) that Colalloy will obtain sharper radii of bending without cracking.

PAR. 6. In truth and in fact Colalloy, because of such electronizing treatment as above described, does not have: (1) Increased mechanical and physical characteristics, (2) greater tensile strength, (3) greater yield strength, (4) faster machinability, (5) better formability, (6) higher corrosive resistance, (7) greater durability nor (8) does Colalloy obtain sharper radii of bending without cracking. As a matter of fact the so-called electronizing process or treatment does not have any appreciable effect upon aluminum and aluminum alloys subjected thereto.

PAR. 7. In the course and conduct of their business, described in paragraph 2 hereof, and for the purpose of aiding and promoting the sale, by them, of Colalloy, in the commerce as aforesaid,

(a) Respondents represent on their letterheads, envelopes, bill heads, acknowledgements of orders and in other advertising media as follows:

COLONIAL ALLOYS COMPANY

And Associated Companies

Base Products Company—Colonial Stove Company

Since 1851

Colonial-Philadelphia Building

East Somerset-Trenton Ave. and Martha Sts.

Philadelphia, Pennsylvania, U.S.A.

(b) Respondents in letters, circulars and other advertising material refer to their "Sheet and Tube Division," "Metals Division," "Specialties Division" and "Treasury Division," etc.

(c) Respondents on their letterheads state, "Our 91st Year."

PAR. 8. In truth and in fact:

1. "Colonial Alloys Co." has not been in existence "since 1851" as it was not organized until some 75 years subsequent to that date.

2. "Base Products Co." has no apparent association or connection with respondents' business, as described in paragraph 2 hereof, other than to garnish respondents' literature.

3. "Colonial Stove Co." is associated with respondents' business, as described in paragraph 2 hereof, only to the extent that said name is sometimes used by respondents when making purchases of aluminum.

4. "Colonial-Philadelphia Building" is a warehouse numbered 2154 East Somerset Street, Philadelphia, Pa.

5. Respondents have not been engaged for 91 years in the business, as described in paragraph 2 hereof, but have only been so engaged for a comparatively few years.

6. Respondents' representations, as set forth in paragraph 7 hereof, have been made for the purpose of conveying false impressions as to the size, importance and character of the business, described in paragraph 2 hereof, engaged in by respondents.

PAR. 9. In the course and conduct of their business, described in paragraph 2 hereof, and for the purpose of aiding and promoting the sale, by them, of Colalloy, in the commerce as aforesaid, respondents represent, directly and by implication, that they own, operate or control mills or factories engaged in the manufacture of Colalloy.

In truth and in fact respondents do not own, operate or control any such mills or factories so engaged in such manufacturing. Respondents are not manufacturers of Colalloy; they only subject aluminum and its alloys to the so-called electron-izing process above described and call it Colalloy.

PAR. 10. In the course and conduct of their business, described in paragraph 2 hereof, and for the purpose of aiding and promoting the sale, by them, of Colalloy, in the commerce as aforesaid, respondents represent that "COLALLOY ALLOYS are approximately 10 percent stronger than the minimum specifications of other *Army and Navy approved Aluminum alloys*."

Through the use of the aforesaid representation and others relating to respondents' electron-izing treatment or process, respondents import and imply that the strength of Colalloy in excess of the minimum specifications of "other Army and Navy approved aluminum alloys" is peculiar to Colalloy and is the result of the so-called electron-izing process or treatment used by the respondent.

In truth and in fact, any strength found in respondents' said Colalloy in excess of the minimum specifications of the Army or Navy is not peculiar to respondents' said product or the result of any process or treatment to which respondents subject said Colalloy. There is a practice among recognized fabricators of aluminum of using a minimum figure to indicate tensile strength, yield strength and elongation, which is from 10 percent to 15 percent below the actual strength of the aluminum alloy. This 10 percent to 15 percent of strength in excess of the minimum strength figure used is a "safety factor" to insure that, in practically every instance, aluminum alloy will more than meet specifications. Any strength in excess of the minimum specifications of the Army or Navy found in Colalloy, is the result of the aforesaid practice on the part of recognized fabricators of aluminum alloys.

PAR. 11. In the course and conduct of their business in said commerce as aforesaid, and for the purpose of aiding and promoting the sale by respondents of said Colalloy, respondents have represented to purchasers and prospective purchasers engaged in the production of material under contracts with the War and Navy Departments of the United States and with representatives of various other United Nations to whom time is of the essence that respondents can make deliveries of Colalloy faster and at an earlier date than can recognized fabricators of their aluminum and aluminum alloy products.

As a result of said representations many holders of such contracts purchased said Colalloy from the respondents instead of purchasing said alu-

minum and aluminum alloys from the fabricators thereof, and the respondents' deliveries were not made on the dates promised and in many instances no deliveries were made at all; and as a result substantial delays and impediments were caused by respondents to purchasers engaged in supplying material under said contracts. In some few instances respondents did make delivery of said product on the dates promised.

PAR. 12. In the course and conduct of their business of selling and distributing Colalloy, described in paragraph 2 hereof, respondents and their agents have prepared and distributed, among customers and prospective customers, large quantities of mimeographed and printed advertising material extolling the "qualities" of Colalloy and its "superiority" over comparable aluminum alloys and promising to such customers and prospective customers faster deliveries of Colalloy than such customers or prospective customers could obtain on aluminum and its alloys from recognized fabricators thereof. As a result many manufacturers engaged in the war effort and needing such critical and vital war material as aluminum and its alloys to fill high priority orders, were induced to place large and substantial orders for Colalloy with respondents, instead of with recognized fabricators of aluminum and its alloys, and at prices which ranged from 20 percent to 60 percent higher than the prices charged for comparable aluminum alloys by such recognized fabricators thereof.

PAR. 13. The acts, practices and methods of respondents in making and using the aforesaid false and misleading statements, representations and implications, have the capacity and tendency to, and do, mislead and deceive the purchasing public into the erroneous and mistaken belief that such statements representations and implications are true and to cause a substantial portion of the purchasing public to purchase Colalloy because of such erroneous and mistaken beliefs. As a result trade in commerce between and among the several States of the United States and in the District of Columbia has been unfairly diverted to the respondents from their competitors in said commerce, to the injury of said competitors and to the public.

PAR. 14. The aforesaid acts and practices of the respondents, as herein alleged, are all to the prejudice 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.

REPORT, FINDINGS AS TO THE FACTS, AND ORDER

Pursuant to the provisions of the Federal Trade Commission Act, the Federal Trade Commission on April 15, 1943, issued and subsequently served its complaint in this proceeding upon the respondents named in the caption hereof, charging them with the use of unfair methods of competition in commerce and unfair and deceptive acts and practices in commerce in violation of the provisions of said act. After the issuance of said complaint and the filing of respondents' answer, testimony and other evidence in support of and in opposition to the allegations of said complaint were introduced before an examiner of the Commission theretofore duly designated by it, and said testimony and other evidence were duly recorded and filed in the office of the Commission. Thereafter, the proceeding regularly

came on for final hearing before the Commission on the said complaint, answer, testimony and other evidence, report of the trial examiner and exceptions thereto, briefs in support of and in opposition to the complaint, and the oral arguments of counsel; and the Commission, having duly considered the matter and being now fully advised in the premises, finds that this proceeding is in the interest of the public and makes this its findings as to the facts and its conclusion drawn therefrom.

FINDINGS AS TO THE FACTS

PARAGRAPH 1. (a) Respondent, Samuel L. Cohn, is an individual, residing at 5239 Lebanon Avenue, Philadelphia, Pa. In the conduct of the business, hereinafter described, this respondent has used various assumed names, including Pat Casey, Ward Dewitt, Eric Biddle, L. Born, and S. L. or Sam Cahn.

(b) Respondent, Charles C. Cohn, is an individual, residing at Cheltenham, Pa. He is a brother of respondent, Samuel L. Cohn, and in the conduct of the business, hereinafter described has used various assumed names, including Joseph A. Steele, C. Fay, and Charles Cahn.

(c) Respondent, Edward Engel, is an individual, residing at 133 West Widener Street, Philadelphia, Pa. He has used other names, but declined to disclose them, and in the conduct of the business, hereinafter described, has used only the name Edward Engel or Edward W. Engel.

(d) Respondents, Samuel L. and Charles C. Cohn, are copartners, trading under the names Colonial Alloys Co., Colonial Stove Co., and Base Products Co., with their place of business located at 2154 East Somerset Street, Philadelphia, Pa. Respondent, Edward Engel, an employee or associate of the other respondents, has been variously represented as "chief metallurgist," "chief engineer," and "director of engineering" for Colonial Alloys Co. and has aided, assisted, and cooperated with the other respondents in carrying out the acts and practices hereinafter described. As a part of their business, respondents for several years last past have been engaged in the purchase and resale of aluminum-base alloys, and when resold by respondents such alloys were sold as and under the trade name "Colalloy."

PAR. 2. In the course and conduct of their aforesaid business, respondents have caused the aluminum-base alloys purchased by them to be shipped from points in other States to Philadelphia, Pa.; and, further, have caused such products, when sold by them, to be transported from their place of business in Philadelphia, Pa., to purchasers thereof at their several points of location in various other States of the United States. There has been for more than three years last past a constant current of trade and commerce conducted by respondents in said products among and between various States of the United States. In carrying on their said business, respondents are in competition with others engaged in the sale and distribution of aluminum and aluminum-base alloys in commerce among and between the several States of the United States and in the District of Columbia.

PAR. 3. (a) The origin of the business of respondents, Samuel L. and Charles C. Cohn, in aluminum-base alloys is not shown with precision and there are numerous conflicts in and between the testimony of these respondents. Their father, Abraham Cohn, was engaged in the stove busi-

ness. This business was registered by Abraham Cohn and S. L. Cohn in September 1922 under the assumed trade name of Colonial Stove Co. Samuel L. Cohn testified that he became associated with his father in the stove business in 1914, at which time he was about 14 years of age. In March 1936, after the death of Abraham Cohn, respondents Samuel L. and Charles Cohn registered the assumed trade name of Colonial Stove Co., and in October 1938 S. L. and Charles C. Cohn registered the assumed name of Colonial Alloys Co. Base Products Co. is also an assumed name registered by these respondents in October 1936. These respondents testified that their father developed a method of treating aluminum by immersion in a chemical bath which was said to increase resistance to corrosion, and some time before 1922 an electrical treatment was combined with the chemical bath. Until about 1936 there was no exploitation of this claimed treatment for corrosion except such use as may have been made of it in connection with respondents' stove business. In 1936 these respondents employed Edward Engel, who claims to be a chemist and chemical engineer. Engel testified that after his preparatory work he attended Penn State College but did not get a degree there. He declined to state where he got the Bachelor of Science degree claimed and when directed to answer finally said he went to the Sorbonne University in 1930 and got his B. S. degree there. He does not claim to have any other degree, though the designation "Ph. D." has been used by him. Engel is said to have suggested to the Cohn brothers the possibility that the process for increasing resistance to corrosion might, through causing some molecular or atomic change, affect the internal structure of the metal and improve its physical and mechanical properties. About 1937 respondents began to designate aluminum-base alloys said to have been subjected to the combined chemical and electrical treatment by the trade name "Colalloy" and soon thereafter began an extensive and elaborate advertising campaign in behalf of Colalloy.

(b) The process said to be used in converting aluminum-base alloys into Colalloy is claimed to be a secret known only to the Cohn brothers, and they refused to state what chemicals are used or any details concerning the application of electric current. Their "chief metallurgist," "chief engineer," and "director of engineering," respondent Engel, testified that he has seen the process possibly 75 or 100 times since 1939 but that he does not know its secret. A representative of the War Production Board who was seeking a comparative test between aluminum-base alloys before and after treatment by the secret process testified that respondents told him that only three people knew the secret of the process—the Cohn brothers and a deaf and dumb workman.

(c) The claimed process has been variously designated as "electronizing" and "Colalloying." One respondent asserted that there was a difference in the time electrical current was supplied as between "electronizing" and "Colalloying." The record shows, however, that the result of the process by either name was called "Colalloy," and no distinction was made in claims for it because of any difference in treatment. In connection with the process claimed, it is noted that respondents' father had no technical training; respondent, Samuel L. Cohn, graduated from high school in 1918, attended the University of Pennsylvania about one semester, and had no other schooling; and respondent, Charles C. Cohn, graduated from

high school in 1920 and had no further schooling. Neither of these respondents is an engineer, chemist, or metallurgist.

(d) In general outline, the secret process consists of placing the aluminum alloy to be treated in a vat containing a liquid having the appearance of water but said to be a chemical solution. There is an electric panel or switchboard having a number of switches on it near the vat. Two cables, each ending in a clamp or electrode, lead from this panel and one of these is applied to the aluminum in the vat and the other to the metal side of the vat. By some manipulation of the switches on the panel, a current is said to be passed through this circuit for a short period of time variously described as from three to twenty minutes, depending upon the quantity of metal in the vat. On an occasion when this process was observed, immediately after the current was cut off the metal treated was removed from the vat by workmen with their bare hands and was found to be at room temperature.

(e) Respondents' place of business at 2154 East Somerset Street is a three-story-and-basement brick building about 40 by 110 feet, of which the respondents use one floor in connection with their aluminum-base alloy business, except that the same offices are used by Samuel L. Cohn in carrying on a real estate business. This floor is divided into a general office occupied by several women employees; an office for each of the Cohn brothers; a room occasionally referred to as a laboratory (but generally as the "slop room") which contains a few pliers and wrenches, some Bunsen burners, and containers, but no equipment which would warrant its classification as a laboratory; and a large room containing the panel switchboard, a bandsaw, and the vat for use in treating aluminum alloys by the secret process. Respondents also employ two or three workmen.

(f) Respondents used the name "Colonial Stove Co." in purchasing aluminum-base alloys for the stated reason that it has been in existence longer and its credit is better established. The name "Base Products Co." was used to a very minor extent in purchasing aluminum-base alloys and all sales of Aluminum-base alloys were made under the name "Colonial Alloys Co." Each of these fictitious names, however, represented merely a copartnership between the Cohn brothers.

PAR. 4. (a) In promoting the sale of Colalloy, respondents' advertised upon an ambitious scale. They used on their letterheads, envelopes, billheads, and in other ways:

COLONIAL ALLOYS COMPANY

and Associated Companies

Base Products Co. Colonial Stove Co.

Since 1851

Colonial Philadelphia Bldg.

East Somerset—Trenton Ave. and Martha Streets

Philadelphia, Pa., U. S. A.

* * * * *

Since 1851

Researchers—Developers—Manufacturers

Chemical—Metallurgical—Electro-Chemical

Processes and Electronics

Respondents have not been in business since 1851 and the dates of origin of the business represented by the several trade names are as heretofore stated. Respondents' letters, circulars, and other advertising material refer to "Sheet and Tube Division," "Metals Division," "Specialties Division," "Treasury Division," and "Technical Processes Division." These so-called divisions are mere window dressing calculated to give a false impression of the size and scope of their business.

(b) Respondents' advertising generally is calculated to convey the impression that they are manufacturers and, in addition, numerous specific representations are made which directly claim the possession of manufacturing facilities. For example, in connection with pictures of industrial installations, respondents represent:

Hundreds of Dies and Tools are available to make many sizes of Industrial and Commercial Equipment (Comm. Ex. 73).

In connection with a picture of fabricated products, respondents represent:

GIANT TABLE-TOPS FABRICATED FOR RICHARDSON AND ROBBINS CO., Dover, Delaware, of 11 guage No. 93 COLALLOY (Comm. Ex. 75).

In connection with price quotations, which are f.o.b. Philadelphia, respondents refer to:

BASE MILL PRICES COLALLOY FLAT STRIPS AND COILS (Comm. Ex. 83-A).

In writing to the British Air Commission, respondents stated in part:

As Mr. Mehm indicated, it is not in accordance with Company policy, to permit visitors or inspection at the mills (Comm. Ex. 105-A).

Respondents advertise that:

The Colonial Alloys Company, after many years of extensive research with numerous variations of formulae in aluminum base alloying elements, developed a total of 134 formulae. Of this total they chose the outstanding formulae to be marketed; * * * (Comm. Ex. 254-A).

In writing the Sperry Gyroscope Co., respondents stated in part:

Admittedly our price ranges are higher than those of the lower property alloys. This is readily justified, not alone in the higher costs of production, * * * (Comm. Ex. 145-A).

Respondents' terms with respect to orders included:

Any patterns, jigs, dies, tools or other equipment which we construct for the purchaser will be used in connection with shop equipment and will be used exclusively for the manufacture of material for the purchaser (Comm. Ex. 153-B).

Respondents do not produce aluminum or aluminum-base alloys or fabricate aluminum or its alloys. They buy from producers, distributors, and users the aluminum-base products already fabricated into the form in

which they sell them. They have no facilities for producing, fabricating, or processing such products other than the so-called secret process heretofore described.

(c) Much of the advertising material used by the respondents in the early phases of their elaborate advertising campaign was simply plagiarized in whole or in part from the advertising, technical booklets, and other material published by the Aluminum Co. of America. In this copying, respondents merely substituted the word "Colalloy" for the words "aluminum" or "Alcoa" used in the publications of the Aluminum Co. of America. Much use was made of the published technical data of the Aluminum Co. of America, including analyses, properties, chemical resistance, electrical conductivity, and other material concerning aluminum alloys. Respondents' copying included pictures of numerous industrial and engineering installations shown in the advertising material of the Aluminum Co. of America. As a result of this copying and the substitution of the word "Colalloy" for that of the aluminum product mentioned by the Aluminum Co. of America, such descriptions accompanying the pictures indicated that Colalloy had been used instead of the products of the Aluminum Co. of America. For example, in connection with the picture of a large bridge, respondents represented:

A new COLALLOY floor system saved 750 tons of dead-weight and added another quarter century to the life of this bridge. It also saved the taxpayers a million and a half dollars (Comm. Ex. 1178).

In connection with a picture of a large structure, respondents represented:

Structural detail showing COLALLOY sections used in constructing a botanical garden building (Comm. Ex. 1178).

In connection with a picture of a streamlined train, respondents represented:

Because of the availability of economical special shapes, COLALLOY lent itself unusually well to the construction of this light, but safe, streamlined train (Comm. Ex. 1178).

There are many other similar instances. When a representative of the Aluminum Co. of America called on respondents for the purpose of putting an end to this copying of his company's advertising material and technical data, there was a discussion of respondents' plan of operation and the higher prices which they obtained and intended to obtain on aluminum-base alloys purchased from the Aluminum Co. of America and others, and in the course of such discussion they agreed that "if you can buy material and resell it to the public under a different name and make them like it," then "Mr. Barnum was right."

PAR. 5. (a) Respondents issued and circulated much advertising material and technical data purporting to be descriptive of Colalloy, its uses, and the properties and characteristics of various types of Colalloy. Through these various statements, respondents represented that in relation to aluminum alloys of comparable composition Colalloy, by reason of the aforesaid "electronizing" or "Colalloying" process, has increased

mechanical and physical characteristics, possesses greater tensile strength and greater yield strength, that it is susceptible of faster machining, has better formability, higher corrosive resistance, greater durability, and will bend over sharper radii without cracking. Respondents further represented that the strength of aluminum-base alloys sold by them as "Colalloy" in excess of the minimum specifications of other Army- and Navy-approved alloys is the result of the aforesaid process.

(b) There are only two primary producers of aluminum and its alloys in this country—the Aluminum Co. of America and Reynolds Metals Co. Both of these companies use an arbitrary table of symbols to designate the various alloys and the treatment which has been given them. The different alloys contain differing quantities of one or more alloying elements such as copper, silicon, manganese, magnesium, zinc, nickel, chromium, lead, and bismuth, resulting in different characteristics in the alloys produced. Limiting consideration here to the wrought type, the different alloys are designated by numerals, each followed by the letter "S"; for example, 17S or 24S. The "S" signifies that the alloy is a wrought aluminum alloy. The addition of the letter "T," for example, 17S-T, means that the particular wrought aluminum alloy has been heat treated. The addition of the letter "R," for instance, 17S-RT, means that the wrought aluminum alloy, after heat treatment, has been cold worked to produce certain changes in its characteristics. The mechanical properties of such alloys are measured in certain recognized and standard ways. The tensile strength is expressed in the number of pounds required to break a cross section of one square inch. Yield strength is the number of pounds of force required to produce $\frac{2}{3}$ of 1 percent permanent set in a cross section of 1 square inch. Elongation is the percentage of increase in length before breaking. For particular purposes, other tests are used, including tests showing the hardness, the shearing strength, the fatigue endurance limit, and density in terms of pounds per cubic inch. There is a wide variation among the different wrought aluminum and aluminum-base alloys in the mechanical properties referred to. The typical yield strength ranges from 5,000 to 55,000 pounds, the typical tensile strength from 13,000 to 70,000 pounds, and the percentage of elongation from 4 to 35. There are other variations, depending upon whether the product is sheet, plate, wire, rods, bars, or other wrought product. Respondents established a different set of symbols to designate various aluminum alloy products, and these symbols can be correlated with the designations of the Aluminum Company of America. For example, Colalloy 301 apparently corresponds to Alcoa 24S-T and Colalloy 801 to Alcoa 17S-T.

(c) There are variations in the physical and mechanical properties of wrought aluminum products produced from the same ingot. Alloying materials are added to aluminum when it is in a molten state and though the alloy is homogeneous in its molten form, when poured into ingots and solidified a segregation of the alloying elements, particularly copper and magnesium, occurs. The rind of the ingot will have a different concentration of the alloying elements than may be found at some depth beneath the surface and the center may have still another or different concentration of such elements. Another factor causing a variation in the mechanical properties is the grain of the ingot, which may be fine on the outer surface, may be a columnar grain below that, and may be an equi-ax grain in the

center. When the ingot is processed to its final shape of sheet, rod, or other wrought product, the variations in concentration of the alloying elements and the grain variations persist and appear in the final product, resulting in variations in physical and mechanical properties. Variations in mechanical properties may also result from porosity in the ingot. The porosity may be eliminated during the processing but the resulting products will have lower strength than products processed from nonporous ingots. The inequalities in strength in products produced from the same ingot, or even within parts of the same product, find expression in the technical data published by Alcoa concerning its different alloys. Using 24S-T as an illustration, the minimum guaranteed tensile strength is 62,000 pounds, whereas the typical tensile strength is 68,000 pounds. This means that the greater percentage of tests of 24S-T range between 67,000 and 69,000 pounds tensile strength. While some 24S-T products may fall below this typical strength, others show considerably greater strength. The mechanical properties of aluminum alloys may also be affected by whether the products are drawn, extruded, or cold worked, and by the straightening process necessary after heat treatment. For example, cold working a 24S-T alloy will increase its tensile strength, and even straightening operations applied to a 24S-T rod have been known to raise the tensile and yield strength to the approximate strength and properties of 24S-RT. The tensile strength of 24S-T in extruded form has been known to go as high as 85,000 pounds, and yield strengths as high as 69,000 pounds have been found.

(d) The various alloys of aluminum also have widely varying characteristics in their resistance to corrosion and to chemicals, some being much more resistant than others. The publications of Alcoa describe the resistance properties of their various alloys and indicate which are most resistant to any particular type of attack.

PAR. 6. (a) In support of the claims of the superiority of Colalloy as compared with other aluminum-base alloys, as heretofore set out, respondents contend that the aluminum products they buy are processed by the so-called secret process and are thus given the superior characteristics claimed for them. In an effort to support these claims, respondents produced several witnesses who testified concerning tests or partial tests made of samples of aluminum-base alloys furnished directly or indirectly by respondents. So far as proving that respondents' so-called secret process increased the properties of the alloys, these tests are substantially worthless.

(b-1) The head of the Physical Testing Section of the Brewster Aeronautical Corporation tested a sample of what purported to be Colalloy 301 furnished to a Brewster official by respondents' New York representative. The results of this test indicated that the sample was better than Alcoa 24S-T and approximately in the range of Alcoa 24S-RT. So far as the witness knew, the product may have been 24S-RT, 17S-RT, or some other aluminum alloy.

(b-2) A mechanical engineer employed by Essex Wire Corporation made a test for corrosion resistance on a sample furnished by respondent and said to be Colalloy. This was not a comparative test but was merely to determine whether the product complied with respondents' claim concerning resistance to corrosion.

(b-3) A testing engineer for Sears, Roebuck & Company tested for resistance to lactic acid corrosion a sample furnished by respondents and said to be Colalloy. This test was made in comparison with another piece of aluminum and indicated a higher resistance by Colalloy. The witness did not know what kind of aluminum the comparative sample was or whether it was an alloy having high or low resistance to corrosion.

(b-4) An official of the Wilmington Provision Co. used some alloy sold to him by respondents as Colalloy in his packing plant as a substitute for wood and galvanized metal and found it better for his purposes in that it did not corrode. He had not before used any aluminum equipment in his plant.

(b-5) The chief engineer for Bastian-Blessing Co. tested a sample said to be Colalloy for resistance to carbonic acid in comparison with tin, stainless steel, and a piece of aluminum. The Colalloy sample was given him by an official of his company. He did not know what type of aluminum alloy the comparative aluminum sample was.

(b-6) The chief metallurgist for Bell & Howell Co. tested samples marked "Colalloy 700" and "Colalloy 403" for resistance to corrosion in comparison with Alcoa 17S-T and 11S-T3. The Colalloy samples were received from the Superintendent of Parts Production of the Bell & Howell Co. No analysis of the Colalloy samples was made and the witness does not know what type of aluminum alloys they were.

(b-7) The vice president of Sharp & Dohme testified that he wanted some metal pipe that would not corrode for use in processing blood plasma. He tried several types of metal, including a piece of aluminum pipe, all of which were unsatisfactory. A piece of Colalloy pipe was tried and it was found satisfactory. He did not know what kind of aluminum alloy he first tried nor the type of alloy furnished under the name Colalloy.

(b-8) A metallurgical engineer for the Locomotive Division of General Motors Corporation tested the mechanical properties of some samples received from respondents and said to be Colalloy. He made no analysis of the samples and did not know the nature or type of the alloys tested.

(b-9) The chief of the Testing Laboratories of the Glenn L. Martin Co. had tests made under his supervision of a sample said to be Colalloy 301. He did not know the source of the sample. The chemical analysis, microstructure, specific gravity, and corrosion resistance were similar to those of Alcoa 24S-T. The mechanical properties reported exceeded the typical 24S-T but were not beyond the range of known tests of 24S-T.

(b-10) Physical tests were made by the Philadelphia laboratory of the Tinius Olsen Testing Machine Co. of several samples of Colalloy furnished by respondents. Some of these tests purported to be comparative tests before and after application of respondents' secret process. The tests were not made in accordance with the accepted procedures of the American Society for Testing Materials, in most instances lacked impartial selection of samples, and the results were not particularly reliable.

(b-11) Tests were made for respondents by an Associate Professor of Mechanical Engineering at the Drexel Institute of Technology. These tests purported to be comparative of samples of aluminum alloys before and after treatment by respondents' secret process. These tests were not made by the accepted procedures of the American Society for Testing Materials and were limited to tests of mechanical characteristics. Because of

the testing procedure, the results, which purport to show slightly more favorable results for the treated as compared with the untreated material, are not particularly reliable.

(c) In connection with its control of the utilization of aluminum-base alloys as a critical war material, the War Production Board desired to ascertain respondents' proper position in the handling of such materials. It made arrangements with respondents for comparative tests and for this purpose employed Lucius Pitkin, Inc., one of the best known metallurgical laboratories. For testing purposes the War Production Board authorized a shipment of 2,500 pounds of aluminum alloy sheets to respondent from the Aluminum Company of America, which sheets were to be held in the shipping cases unopened. When S. A. Tour, consulting engineer and metallurgist and Vice President in Charge of Chemical and Metallurgical Engineering for Lucius Pitkin, Inc., and civilian director of the laboratory of the Frankford Arsenal, called at respondents' place of business at the appointed time, he was told by respondents that the shipment of material authorized by the War Production Board for testing purposes had not arrived. It is significant that while this statement was made on July 17, 1942, respondents had, by letter of July 8, 1942, advised the War Production Board of the arrival of the particular shipment. Mr. Tour was shown 32 aluminum alloy bars lying on the floor of respondents' place of business and was told that these could be used for testing purposes and that they were 17S-T. Though requested, no further identification of these products was supplied by respondents. Three samples were taken, and the remainder of the material was then put through the so-called secret process, after which six additional samples were taken. It is apparent from the variation in the size of the bars and from the spectographic and chemical analyses of the samples that the bars offered for testing were not all a part of the same original lot. The tests of mechanical properties showed erratic results. Mr. Tour concluded as a result of the tests made that the treatment by the so-called secret process produced "no chemical, spectographic, microscopic, or physical change in the metal."

(d) A representative of the Commission arranged for testing aluminum alloys before and after treatment by respondents' process. For this purpose, new material produced by the Aluminum Co. of America was purchased and taken to respondents' place of business, where respondents were given samples. A number of pieces of this material were then cut in half, and one half of each such piece of material was reserved untreated and each of the other halves was then put through respondents' process, and thereafter the treated and the untreated halves were submitted to the National Bureau of Standards for testing to determine whether the portions which had been processed by respondents were superior in any respect to the corresponding portions which were not processed. The materials for testing consisted of 8 aluminum alloy rod and 16 aluminum alloy sheet samples, 4 of the former and 8 of the latter having been processed. After testing by recognized and accepted procedures, the Bureau of Standards reported in part that:

The results of tensile tests and metallographic examinations of the 17ST and 24ST aluminum alloy exhibit rods and sheets indicated that there were no significant differences between corresponding specimens of the materials identified as "Alcoa" and "Colalloy" (Comm. Ex. 44-C).

and, further, that

Inasmuch as no differences were found in the tensile properties and microstructures it is our opinion that the materials marked "Alcoa" and "Colalloy" are essentially identical and consequently significant differences in such properties as machinability, "forming," "dimpling," "stamping," etc. would not be expected (Comm. Ex. 44-C).

(e) Paul B. Faragher, metallurgist with the Aluminum Company of America for the past 24 years; Robert M. Brick, Assistant Professor of Metallurgy of the Hammond Metallurgical Laboratory of Yale University; and William F. Roeser, Chief of the Section of Mechanical Metallurgists of the National Bureau of Standards, all well qualified metallurgists, gave opinion evidence as expert witnesses that respondents' secret process as heretofore described and as carried out at room temperature would not improve in any way the physical or mechanical properties of aluminum alloys.

(f) The Commission concludes from the record that respondents' claimed secret process will not, and does not in fact, produce any significant effect upon aluminum-base alloys.

PAR. 7. The difference between guaranteed and typical properties of aluminum alloys has already been pointed out. Army and Navy specifications for aluminum alloys correspond to the guaranteed minimums, while in fact the typical properties of alloys described in such specifications are considerably higher than the specifications require. This represents a margin of safety which tends to insure that there will not be individual failures to meet the specifications. Respondents traded on this differential by representing that Colalloy alloys are approximately 10 percent stronger than other Army- and Navy-approved alloys. Any additional strength of Colalloy in excess of Army and Navy specifications for aluminum alloys is due to the practice of manufacturers of aluminum alloys of providing the safety factor referred to above, and is not limited to or peculiar to Colalloy.

PAR. 8. (a) In purchasing aluminum-base alloy products from the Aluminum Co. of America and the Reynolds Metals Co., respondents frequently instructed these companies not to stencil or otherwise mark the boxes in which such products were shipped or mark the products themselves or place packing or inspection slips in the boxes, and sometimes respondents furnished their own shipping tags. In some cases respondents asked special marking of the products, such as "47A3C," or asked that the outside of the shipping boxes be marked only "col. Special." The Commission infers from the record, and therefore finds, that such instructions were given to aid respondents in concealing the source of the materials sold by them as Colalloy, and to allow respondents to reship the materials from their place of business in Philadelphia to their customers in the same boxes in which they were received.

(b) There is evidence in the record tending to show that respondents did not subject all the aluminum alloys which they sold as Colalloy to the so-called secret process. Among this evidence is respondents' practice of directing that packing or inspection slips be not put in the containers in which aluminum alloys were shipped to them by the manufacturers. If the alloys were to be removed from the packing cases and subjected to the secret process described, the inclusion of such slips in the containers would be immaterial. There is a showing indicating but trifling purchases of

chemicals by respondents. The amount of electric current used by respondents was so trivial as not to be consistent with any substantial use of the secret process. Respondents had only one source of electric power—the Philadelphia Electric Co. They had in their place of business three electric meters, one for measuring the current consumed in lighting the premises and two meters for measuring the current consumed for power purposes. The two power meters measured the consumption of two electric motors, one an elevator motor and the other driving a shaft, and also the current consumed in their processing of aluminum alloys. The Philadelphia Electric Co. billed respondents for the consumption shown by the power meters as a unit, but separately from the consumption shown on the light meter. During approximately the first six months of 1942 respondents handled about 300,000 pounds of aluminum alloy products through their place of business. During the same period the Philadelphia Electric Co. billed respondents for 1,828 kilowatts of electricity consumed for lighting purposes, an average of about 305 kilowatts per month. During the same period respondents were billed for the consumption shown by the two power meters for a total of 90 kilowatts of electricity, or about 15 kilowatts per month, approximately one-twentieth of the amount of current used in lighting respondents' premises.

(c) The aluminum-base alloys sold by respondents under the name "Colalloy" were sold at much higher prices than comparable aluminum alloys were sold by the actual producers and fabricators of such products. The increase in price varied considerably as between different products. During the 30 days ending April 8, 1942, respondents shipped to Jack & Heintz, Inc., 56,962 pounds of aluminum alloys which they purchased from the Aluminum Co. of America. Respondents' mark-up on these alloys ranged from a low of 10 percent to a high of 127 percent. The total price paid by respondents for these alloy products was \$16,882.13. In selling these particular products to Jack & Heintz, Inc., respondents added \$11,813.01 to the amount paid by them, or an average mark-up of about 69 percent. The mark-up on the sales to Jack & Heintz, Inc., appears to be reasonably representative of respondents' usual pricing practices.

PAR. 9. Aluminum has been a critical war material in heavy demand by manufacturers producing materials for the War and Navy Departments. Respondents have induced numbers of such manufacturers to whom time was of urgent importance to place orders for Colalloy upon the basis of representations by respondents that they could make quicker deliveries of the material ordered than could other sources of aluminum alloys. Among other representations, respondents stated in part:

"COLALLOY" HAS FAVORABLE DELIVERY SITUATION

Furthermore, until such time as we are heavily booked with back-orders, as are the large present suppliers, we do represent a relatively fast source of supply on "Colalloy" for Defense "A" ratings * * *.

"Colalloy" deliveries represent a favorable consideration to take advantage of, during these unusual times. Delayed or broken delivery schedules result in added costs in doing business or economic losses. * * * (Comm. Ex. 266-L).

Respondents also made individual promises in particular cases. For example, in procuring orders from the Continental Screw Co., respondents

promised much prompter deliveries than were available to that concern from the Aluminum Co. of America. Another example occurred in the case of a sale to the Dickey-Grabler Co., where respondents promised deliveries within approximately half the time that deliveries could concurrently be procured from the Aluminum Co. of America. At the time such representations and promises of early delivery were being made by respondents they well knew that they could not make earlier deliveries than the primary producers, and in fact could not make deliveries as promptly because they could not secure delivery from primary producers more promptly than other purchasers from such sources, and after purchase by them the goods were shipped by the primary producer to respondents' place of business in Philadelphia and thereafter reshipped by respondents to their customers. In a number of instances the promises of early deliveries, which were not fulfilled, resulted in unnecessary delays and difficulties to manufacturers producing war materials. Respondents made their largest purchases of aluminum alloys from the Aluminum Co. of America and their purchases were shipped by that company from one of its plants variously located at Edgewater, N. J.; Massena, N. Y.; Detroit, Mich.; Lafayette, Ind.; New Kensington, Pa.; or Alcoa, Tenn., depending upon the type of product purchased. Although the exact extent of the additional delays resulting from shipment to Philadelphia and reshipment from that point cannot be readily determined, it is obvious, for instance, that substantial additional delays in delivery would result from shipping aluminum alloy products from Alcoa, Tenn., to Philadelphia, Pa., and reshipping such products from Philadelphia to Cleveland or Chicago, as compared with a direct shipment from Alcoa, Tenn., to Cleveland or Chicago.

PAR. 10. The use by respondents of the aforesaid false and misleading statements, representations, and implications has the capacity and tendency to, and does, mislead and deceive members of the purchasing public into the erroneous and mistaken belief that such statements, representations, and implications are true and to cause a substantial portion of the purchasing public to purchase Colalloy because of such erroneous and mistaken beliefs, and thereby trade in commerce between and among the several States of the United States has been unfairly diverted to respondents from their competitors to the injury of said competitors and of the public.

CONCLUSION

The aforesaid acts and practices of respondents, are all to the prejudice 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 TO CEASE AND DESIST

This proceeding having been heard by the Federal Trade Commission upon the complaint of the Commission, the answer of respondents, testimony and other evidence taken before an examiner of the Commission

theretofore duly designated by it, report of the trial examiner and the exceptions thereto, briefs in support of and in opposition to the complaint, and the oral arguments of counsel, and the Commission having made its findings as to the facts and its conclusion that respondents have violated the provisions of the Federal Trade Commission Act.

It is ordered, That respondents, Samuel L. Cohn and Charles C. Cohn, copartners trading as Colonial Alloys Co., Colonial Stove Co., Base Products Co., or under any other name, jointly or severally, and respondent, Edward Engel, directly or through any corporate device, in connection with the offering for sale, sale, and distribution of aluminum and aluminum alloys or products thereof in commerce, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from representing, directly or by implication:

1. That respondents manufacture or produce any aluminum or aluminum alloys, or manufacture or fabricate any aluminum or aluminum alloy products, or have any mills or factories for the manufacture or fabrication of any such products.

2. That respondents' business in aluminum and aluminum alloys, whether designated as Colonial Alloys Co., or by any other name, has been in existence for a longer period of time than is the fact.

3. That the nature, size, or extent of respondents' business, including physical properties owned, used, or occupied, is different from or greater than is the fact.

4. That respondents can make delivery of aluminum or aluminum alloys more quickly or with less delay than manufacturers or fabricators of such products, when in order to make the delivery offered respondents must, subsequent to receipt of orders, purchase such products from manufacturers or fabricators.

5. That the strength of aluminum alloys sold as Colalloy, or under any other name, in excess of minimum Army and Navy specifications for aluminum alloys is greater in any degree than that of other Army- and Navy-approved aluminum alloys.

6. That any aluminum or aluminum alloys offered for sale or sold by respondents under the name Colalloy, or under any other name, have greater tensile strength, greater yield strength, are susceptible of faster machining, have better formability, greater durability, will bend over sharper radii without cracking, or have other greater or better physical or mechanical characteristics than like aluminum and aluminum alloys offered for sale or sold by others.

7. That respondents' claimed secret process, whether under the name "Colalloying," "Electronizing," or any other name, is capable of increasing or improving, or does increase or improve, in any way the physical or mechanical characteristics of aluminum or aluminum alloys.

It is further ordered, That respondents shall, within 60 days after the 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 this order.