In the Matter of

CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR

Investigation No. 337-TA-196

USITC PUBLICATION 1858

MN 1986

United States International Trade Commission / Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

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United States International Trade Commission
Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION -
Washington, D.C. 20436

In the Matter of

CERTAIN APPARATUS FOR INSTALLING)
ELECTRICAL LINES AND COMPONENTS)
THEREFOR

Investigationft. 337-TA-196

NOTICE OF COMMISSION DECISION TO REVERSE PORTIONS OF INITIAL DETERMINATION; TO ISSUE A GENERAL EXCLUSION ORDER; AND TO ISSUE CEASE AND DESIST ORDERS

AGENCY: U.S. International Trade Commission.

ACTION: Reversal of portions of an initial determination (ID) granting complainant's motion for summary determination; issuance of a general exclusion order; issuance of two cease and desist orders prohibiting respondents Emergency Products Corp. (EPC) and Alarm Supply Co., Inc. (ASC), from false advertising, passing off, and selling infringing products from inventory.

SUMMARY: The Commission has determined to reverse in part the administrative law judge's (AL.I's) ID in the above-captioned investigation granting the motion of complainant Scoggins Manufacturing, Inc. (SMI), for summary determination of violation of section 337 of the Tariff Act of 1930 (19 U.S.C. S 1337). The Commission has determined to reverse the AL.I's findings of no direct infringement of U.S. Letters Patent 3,697,188, no contributory infringement of U.S. Letters Patents Nos. 3,697,188 and 3,611,549 as to the flexible drill shaft, and the existence and infringement of a common law trademark.

The Commission has also determined that a general exclusion order, and cease and desist orders directed to respondents EPC and ASC, pursuant to sections 337(d) and (f) are the appropriate remedies for the violations of section 337 found to exist; that the public interest considerations enumerated in sections 337(d) and (f) do not preclude such relief; and that the amount of the bond during the Presidential review period under section 337(g) shall be 420 percent of the entered value of the imported articles.

FOR FURTHER INFORMATION CONTACT: William E. Perry, Esq., Office of General Counsel, U.S. International Trade Commission, telephone 202-523-0499.

SUPPLEMENTARY INFORMATION: On May 14, 1984, complainant SMI filed a complaint alleging unfair methods of competition and unfair acts in the importation and sale of certain apparatus for installing electrical lines. On June 20, 1984, the Commission instituted an investigation to determine whether there is a violation of section 337 by reason of: (1) direct, contributory, and induced infringement of the claims of U.S. Letters Patents *Nos.* 3,697,188 and 3,611,549; (2) infringement of complainant's common law trademark; (3) false advertising; and (4) passing off. On December 27, 1984, the ALJ issued an ID that found two respondents in default and granted complainant's motion for summary determination of violation of section 337. The ALJ determined that there was a violation of section 337 in the unauthorized importation and sale of certain apparatus for installing electrical lines and components therefor, on the basis of findings of (1) contributory infringement of claims 1 and 2 of the '188 patent; (2) induced infringement of claims 1 and 2 of the '188 patent and claim 1 of the '549 patent; (3) the existence and infringement of a common law trademark; (4) passing off; and (5) false advertising. Complainant filed a petition for review of the ID. No other petitions for review or agency comments were received.

After examining the record in this investigation, including the ID, the petition for review, the brief in support of the petition, and the response thereto, the Commission determined to review the following issues: direct and contributory infringement of U.S. Letters Patents Nos. 3,697,188 and 3,611,549, and the existence and infringement of a common law trademark. (50 Fed. Reg. 6072 (Feb. 13, 1985)).

Complainant SKI and the Commission investigative attorney filed written submissions on the issues under review and on the issues of remedy, the public interest, and bonding. No other written submissions or agency comments were received.

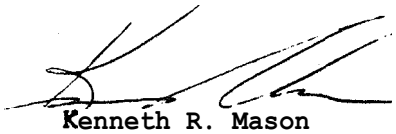
The authority for the Commission's determinations is contained in section 337 of the Tariff Act of 1930 and in sections 210.50-.56 of the Commission's Rules of Practice and Procedure (49 F.R. 46,1371 (Nov. 23, 1984); to be codified at 49 C.F.R. SS 210.50-.56).

Notice of this investigation was published in the Federal Register of June 20, 1984 (49 Fed. Reg. 25318).

Copies of the Commission's Action and Order, the Commission Opinion issued in connection therewith, and all other nonconfidential documents filed in connection with this investigation are available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the

Secretary, U.S. International Trade Commission, 701 E Street NW., Washington, D.C. 20436, telephone 202-523-0161.

By order of the Commission.



Kenneth R. Mason
Secretary

Issued: June 20, 1985

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	)	
	)	Investigation No. 337-TA-106
CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR	)	

NOTICE OF COMMISSION DECISION TO DENY COMPLAINANT'S PETITION FOR RECONSIDERATION OF COMMISSION DETERMINATION; REFORMATION OF CEASE AND DESIST ORDERS

AGENCY: U.S. International Trade Commission.

ACTION: Denial of complainant Scoggins Manufacturing Inc.'s (SMI) petition for reconsideration of the Commission's determination, and, on Commission's own motion, reformation of cease and desist orders issued to Emergency Products Corp. (EPC) and Alarm Supply Co., Inc. (ASC) to apply to all infringing imported apparatus in inventory, not just apparatus imported after June 20, 1984.

SUMMARY: The Commission has determined to deny SMI's petition for reconsideration pursuant to Commission rule 210.60 of the Commission's decision of June 20, 1985, requesting that the cease and desist orders to EPC and ASC be amended, because SMI had the opportunity to brief the Commission on the issue in the original investigation, but chose not to do so. The Commission, however, has determined on its own motion to reform the cease and desist orders in order to reflect the Commission's original intention that they apply to all infringing imported products in inventory, not just apparatus imported after June 20, 1984.

FOR FURTHER INFORMATION CONTACT: William E. Perry, Esq., Office of General Counsel, U.S. International Trade Commission, telephone 202-523-0499. Hearing—impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-724-0002.

SUPPLEMENTARY INFORMATION: On May 14, 1984, complainant SMI filed a complaint pursuant to section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) alleging unfair methods of competition and unfair acts in the importation and sale of certain apparatus for installing electrical lines. On June 20, 1984, the Commission instituted an investigation to determine whether there is a violation of section 337 by reason of: (1) direct, contributory, and induced infringement of the claims of U.S. Letters Patents Nos. 3,697,188 and 3,611,549; (2) infringement of complainant's common—law trademark; (3) false advertising; and (4) passing off.

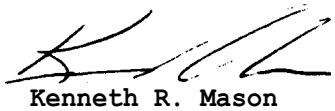
On June 20, 1985, the Commission determined that there was a violation of section 337 and issued a general exclusion and two cease and desist orders directed to respondents ASC and EPC.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, 19 U.S.C. S 1337, and in section 210.60 of the Commission's Rules of Practice and Procedure, 19 C.F.R. S 210.60.

Notice of this investigation was published in the Federal Register of June 20, 1984 (49 Fed. Reg. 25318).

Copies of the Commission's Action and Order and all other nonconfidential documents filed in connection with this investigation are available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 701 E Street NW., Washington, D.C. 20436, telephone 202-523-0161.

By order of the Commission.



Kenneth R. Mason
Secretary

Issued: December 6, 1985

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR	Investigation No. 337—TA-196

COMMISSION ACTION AND ORDER

Background

A complaint was filed with the Commission on May 14, 1984, by Scoggins Manufacturing, Inc. (SMI), alleging unfair acts and methods of competition in the unauthorized importation and sale of certain apparatus for installing electrical lines and components therefor. The Commission on June 20, 1984, instituted the above—captioned investigation to determine whether there is a violation of section 337 of the Tariff Act of 1930 (19 U.S.C. 1337) in the importation of certain apparatus for installing electrical lines and components therefor into the United States, or in their sale, by reason of: (1) direct, contributory, and induced infringement of the claims of U.S. Letters Patents Nos. 3,697,188 and 3,611,549; (2) infringement of complainant's common—law trademark; (3) false advertising; and (4) passing off, the effect or tendency of which is to destroy or substantially injure an industry, efficiently and economically operated, in the United States. 49 Fed. Reg. 25318.

On June 20, 1985, the Commission determined that there was a violation of section 337 and issued an exclusion order and cease and desist orders directed to respondents Alarm Supply Co., Inc. (ASC), and Emergency Products Corp (EPC). On June 25, 1985, SMI filed a petition for reconsideration of the Commission's determination pursuant to Commission rule 210.60 (19 C.F.R. 210.60). SMI argued that the two cease and desist orders should not be limited to sales from inventory of infringing apparatus imported after June 20, 1984, the date the investigation was instituted, but should instead apply to sales of all imported infringing apparatus from inventory. The Commission investigative attorney (IA) filed an opposition to the petition.

Action

Having reviewed the record in this investigation, including the aforementioned written submissions, the Commission has determined to deny SMI's petition for reconsideration. SMI had an opportunity to submit arguments regarding the contents of the cease and desist orders during the investigation, but did not do so. The. Commission, however, has determined on its own motion to reform the cease and desist orders to reflect the Commission's, riginal intention that they apply to all imported infringing apparatus, whenever imported, not just to apparatus imported after June 20, 1984. Specifically, the Commission has determined to delete the last sentence on page 2 of the cease and desist orders, which limits application of the orders to apparatus acquired by respondents ASC and EPC subsequent to June 20, 1984. The Commission has also determined to delete the references in Part IV(B) and (C) of the cease and desist orders that limit respondents' reporting requirements to apparatus acquired subsequent to June 20, 1984.

Order

Accordingly, it is hereby ORDERED THAT

1. SMI's petition for reconsideration is denied;

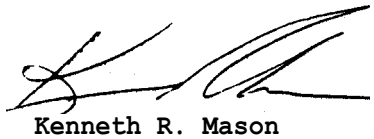
2. The cease and desist orders issued to Emergency Products Corp. and Alarm Supply Co., Inc., are reformed to apply to all imported infringing apparatus, whenever imported;

3. The last sentence on page 2 of the cease and desist orders and the references in Part IV(B) and (C), limiting application of the orders to apparatus acquired by respondents subsequent to June 20, 1984, are deleted;

4. Notice of this Action and Order shall be published in the Federal Register; and

5. A copy of this Action and Order shall be served upon each party of record in this investigation and upon the Department of Health and Human Services, the Department of Justice, and the Federal Trade Commission.

By order of the Commission.



Kenneth R. Mason
Secretary

Issued: December 6, 1985

CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR

337-TA-196

Certificate of Service

I, Kenneth R. Mason, hereby certify that the attached NOTICE OF COMMISSION DECISION TO DENY COMPLAINANT'S PETITION FOR RECONSIDERATION OF COMMISSION DETERMINATION; REFORMATION OF CEASE AND DESIST ORDERS, was served upon Juan Cockburn, Esq., and upon the following parties via first class mail, an, air,mail where necessary on, December 9, 1985.

Kenne h R. Mason, Secretary
U.S. I ternational Trade Commission
701 E treet, N.W.
Washington, D.C. 20436

For Complainant Scoggins Manufacturing, Inc.:

Bruce M. Collins, Esq.
Mathews, Woodbridge, Goebel, Laughlin.
Pugh and Collins
22 Park Place
Morristown, New Jersey 07960

Respondents:

Emergency Products Corporation
25 Eastmans Road
Parisppany, New Jersey 07054

Alarm Supply Company, Inc.
12551 Globe Road
Livona, Michigan 48150

Ming Chang Carpenter Auger Bit Co., Ltd.
P.O. Box 24
Tsao Tun Chen
Nantou, Taiwan

Southwold, Ltd.
8 Princess Building
Hong Kong

Comhome International Co., Ltd.
5th Floor #3
150, Hoping W. Rd., Section 1
Taipei 107, Taiwan

Aritech
25 Newbury Street
Framingham, Massachusetts 01701

Service List - Page 2

Signal Supply Corporation
8 Schmitz Drive
Flanders, New Jersey 07836

The Alarmist
136 Franklin Street
Fall River, Massachusetts 02720

GOVERNMENT AGENCISE:

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U.S. Customs Service
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Washington, D.C. 20229

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	
CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR	**Investigation No. 337—TA-196**

ORDER TO CEASE AND DESIST

IT IS HEREBY ORDERED THAT Alarm Supply Co., Inc., 12551 Globe Road, Livona, Michigan 48150, cease and desist from violating section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) by false advertising, passing off, or by inducing or contributing to infringement of claim 1 of U.S. Letters Patent 3,611,549.

I

(Definitions)

As used in this order:

(A) "Commission" shall mean the United States International Trade Commission.

(B) "ASC" shall mean Alarm Supply Co., Inc., 12551 Globe Road, Livona, Michigan 48150.

(C) "United States" shall mean the 50 States, the District of Columbia, and Puerto Rico.

II

(Applicability)

The provisions of this Order shall apply to ASC and to its principals, stockholders, officers, directors, employees, agents, licensees, distributors,

controlled (whether by stock ownership or otherwise) and/or majority—owned business entities, successors, and assignees, all those persons acting-in concert with them, and to each of them, and to all other persons who receive actual notice of this Order by service in accordance with section VI hereof.

III

(Conduct Prohibited)

ASC shall not induce or contribute to the practice within the United States of any method for the use of apparatus 'for the drilling of holes in inaccessible locations, where such methOds infringe claim 1 of U.S. Letter Patent 3,611,549, except as such method may be licensed by the owner or owners of said patent. The prohibited conduct includes: (1) sale of imported drilling apparatus for use in the method covered by claim 1 of the '549 patent; (2) use, in connection with the sale of such drilling apparatus, of brochures, pamphlets, leaflets, advertisements, or other sales literature that advocates, explains, describes,' or illustrates any methods of use covered by claim 1 of U.S. Letter Patent 3,611,549; (3) oral or written instructions to direct or indirect vendees, whether in connection with the sale of such drilling apparatus or in the course of a cuStomer, service call, that advise said vendees in the practice of any method covered by claim 1 of U.S. Letters Patent 3,611,549, where it is apparent that such method is or will be used in the operation of such drilling apparatus imported and sold by ASC.

ASC shall not falsely advertise or pass off infringing apparatus as the apparatus of Scoggins Manufacturing, Inc.

This order is effective with respect to imported drilling apparatus acquired by ASC subsequent to June 20, 1984.

IV

(Reporting)

Within 14 days after the last day of each reporting period specified below, ASC shall report to the Commission:

(A) Its importations, if any, during the reporting period in question, of drilling apparatus;

(B) Its sales in the United States, during the reporting period in question, of drilling apparatus acquired by ASC subsequent to June 20, 1984; and

(C) All contracts, whether written or oral, entered into during the reporting period in question, to sell imported drilling apparatus subsequent to June 20, 1984.

In connection with the importations and sales of drilling apparatus referred to in paragraphs A and B above, ASC shall provide the Commission with two copies of all invoices, delivery orders, bills of lading, and other documents concerning the importation or sale in question. Such copies shall be attached to the reports required by paragraphs A and B above.

In connection with the sales of imported drilling apparatus referred to in paragraph B above, ASC shall provide to the Commission two copies of each brochure, pamphlet, leaflet, instruction sheet, or other item of sales or technical literature distributed to one or more direct or indirect vendees where such brochure, pamphlet, leaflet, instruction sheet, or other item of sales or technical literature advocates, describes, explains, illustrates, or refers to any method of use of drilling apparatus. For each brochure, - pamphlet, leaflet, instruction sheet, or other item or sales or technical literature, ASC shall indicate to which vendee(s) or prospective vendee(s) such document was distributed. The required copies shall be attached to the reports required by paragraph B above.

In connection with the sales of imported drilling apparatus referred to in paragraph 8 aboVe, ASC shall provide the Commission with two copies of each advertisement or announcement published subsequent to the date of issuance of this Order. For each advertisement or announcement furnished, ASC shall indicate when and in which publication such advertisement or announcement was published. The required copies shall be attached to the reports required by paragraph B above.

The first report required under this section shall cover the period commencing June 20, 1984, and ending on June 30, 1985. The second report shall cover the period July 1, 1985, through June 30, 1986. The third period shall cover the period July 1, 1986, through June 30, 1987. The fourth report shall cover the period July 1, 1987, through June 30, 1988. The fifth and last report shall cover the period July 1, 1988, through June 30, 1989.

railure to report as required by this section shall constitute a violation of this Order.

V

(Compliance and Inspection)

ASC shall furnish or• otherwise make available to the Commission or its authorized representatives, upon written request by the Commission mailed to ASC's principal officer in the United States, all books, ledgers, accounts, correspondence, memoranda, financial reports, and other records or documents in its possession or control for the purpose of verifying any matter or statement contained in the reports required under section IV of this Order.

VI

(Service of Order)

ASC is ordered to:

(A) Serve, within 30 days after the date of issuance of this Order, a copy of the Order upon each of its respective officers, directors, managing agents, agents, and employees who have any responsibility for the marketing, distribution, or sale of imported drilling apparatus in the United States.

(D) Serve, within 30 days after succession of any of the persons referred to in paragraph A above, a copy of this Order upon each successor.

(C) Maintain such records as will show the name, title, and address of such officer, director, managing agent, agency, and employee upon whom the Order has been served, together with the date on which service was made.

VII

(Confidentiality)

Information obtained by means provided in sections IV and V of this Order will be made available only to the Commission and its authorized representatives, will be entitled to confidential treatment and will not be divulged by any authorized representative of the Commission to any person other than duly authorized representatives of the Commission, except as may be required in the course of securing compliance with this Order, or as otherwise required by law. Disclosure hereunder will not be made by the Commission without 10 days prior notice to ASC by service of such notice on ASC's-principal office in the United States.

VIII

(Enforcement)

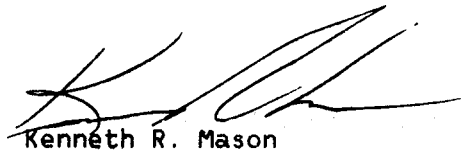
Violation of this Order may result in an action for civil penalties in accordance with the provisions of section 337(f) of the Tariff Act of 1930 (19 U.S.C. § 1337(f)) and such other action as the Commission may deem appropriate. In determining whether ASC is in violation of this Order, the Commission may infer facts adverse to ASC if ASC fails to provide adequate or timely information as required by this Order.

IX

(Modification)

This Order may be modified by the Commission on its own motion or upon motion by any person pursuant to section 211.57 of the Commission's Rules of Practice and Procedure.

By order of the Commission.



Kenneth R. Mason
Secretary

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR	Investigation No. 337—TA-196

ORDER TO CEASE AND DESIST

IT IS HEREBY ORDERED THAT Emergency Products Corp., 25 Eastmans Road, Parsippany. New Jersey 07054, cease and desist from violating section 337 of the Tariff Act of 1930 (19 U.S.C. §1337) by false advertising, passing off, or inducing or contributing to infringement of claim 1 of U.S. Letters Patent 3,611,549.

I
(Definitions)

As used in this order:

(A) "Commission" shall mean the United States International Trade Commission.

(B) "EPC" shall mean Emergency Products Corp., 25 Eastmans Road, Parsippany, New Jersey 07054.

(C) "United States" shall mean the 50 states, the District of Columbia, and Puerto Rico.

II

(Applicability)

The provisions of this Order shall apply to EPC and to its principals, stockholders, officers, directors, employees, agents, licensees, distributors,

controlled (whether by stock ownership or otherwise) and/or majority—owned business entities, successors, and assignees, all those persons acting in concert with them, and to each of them, and to all other persons who receive actual notice of this Order by service in **accordance with section VI hereof.**

III

(Conduct Prohibited)

EPC shall not induce or contribute to the practice **within the United States of any method for the use of apparatus for the drilling of holes in** inaccessible locations, where such **method infringes claim 1 of U.S. Letters Patent 3,611,549, except as such method may be licensed by the owner or owners** of said patent. The prohibited conduct includes (1) **sale of imported drilling apparatus for use in the method covered by claim 1 of the '549 patent;** (2) use, in connection **with the sale of such drilling apparatus, of brochures, pamphlets, leaflets, advertisements, or other sales literature which advocates, explains, describes, or illustrates any method of use covered by claim 1 of** U.S. **Letters Patent 3,611,549; (3) oral or written instructions to direct or indirect vendees, whether in connection with the sale of such drilling apparatus or in the course of a customer service call, that advise said vendees in the practice of any method covered by claim 1 of U.S. Letters Patent 3,611,549, where such method is or will be used in the operation** of such drilling apparatus imported and sold **by EPC.**

EPC shall not falsely advertise or pass off infringing apparatus as that of Scoggins Manufacturing, Inc.

This order is effective with respect to imported drilling apparatus acquired by EPC subsequent to June 20, 1984.

IV

(Reporting)

Within 14 days after the last day of each reporting period specified below, EPC shall report'to the Commission:

(A) Its importations, if any, during the reporting period in question, of drilling apparatus;

(B) Its sales in the United States, during the reporting period in question, of drilling apparatus acquired subsequent to June 20, 1984; and

(C) All **contracts, whether written or oral, entered into during the reporting period in question, to sell imported drilling apparatus acquired subsequent to June 20, 1984.**

In connection with the importations and sales of drilling apparatus referred to in paragraphs A and B above, EPC shall provide the Commission with two copies of all invoices, delivery orders, bills of lading, and other documents concerning the importation or sale in question. Such copies shall be attached to the reports required by paragraphs A and B above.

In connection with the sales of imported drilling apparatus referred to in paragraph B above, EPC shall provide to the Commission two copies of each brochure, pamphlet, leaflet, instruction sheet, or other item of sales or technical literature distributed to one or more direct or indirect vendees where such brochure, pamphlet, leaflet, instruction sheet, or other item of sales or technical literature advocates, describes, explains, illustrates, or refers to any method of use of drilling apparatus. For each brochure, pamphlet, leaflet, instruction sheet, or other item of sales or technical literature, EPC shall indicate to which vendee(s) or prospective vendee(s) such document was distributed. The required copies shall be attached to the reports required by paragraph B above.

VIII

(Enforcement)

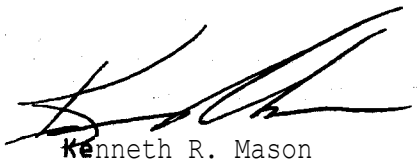
Violation of this Order may result in an action for civil penalties in accordance with the proVisions of section 337(f) of the Tariff Act of 1930 (19 U.S.0 $_{S}$ 1337(f)) and such other action as the Commission may deem appropriate. In determining whether EPC is in violation of this Order, the Commission may infer facts adverse to EPC if EPC fails to provide adequate or timely information as required by this Order.

IX

(Modification)

This Order may be modified by the Commission on its own motion or upon motion by any person pursuant to section 211.57 of the Commission's Rules of Practice and Procedure.

By order of the Commission.



Kenneth R. Mason
Secretary

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	
CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR	Investigation No. 337-TA-196

COMMISSION ACTION AND ORDER

Background

A complaint was filed with the Commission on May 14, 1984, by Scoggins Manufacturing, Inc. (SMI), alleging unfair acts and methods of competition in the unauthorized importation and sale of certain apparatus for installing electrical lines and components therefor. The Commission on June 20, 1984, instituted the above-captioned investigation to determine whether there is a violation of section 337 of the Tariff Act of 1930 (19 U.S.C. S 1337) in the importation of certain apparatus for installing electrical lines and components therefor into the United States, or in their sale, by reason of (1) direct, contributory, and induced infringement of the claims of U.S. Letters Patents Nos. 3,697,188 ('188 patent) and 3,611,549 ('549 patent); (2) infringement of complainant's common law trademark; (3) false advertising; and (4) passing off, the effect or tendency of which is to destroy or substantially injure an industry, efficiently and economically operated, in the United States. 49 Fed. Reg. 25318.

On December 27, 1984, the presiding administrative law judge (ALJ) issued an initial determination (ID) that found two respondents in default and granted complainant's motion for summary determination of violation of section 337. The ALJ determined that there was a violation of section 337 in the unauthorized importation and sale of certain apparatus for installing electrical lines and components therefor, on the basis of findings of (1) contributory infringement as to the coupling device of the '188 patent; (2) induced infringement as to the flexible drill shaft and the coupling device of the '188 and '549 patents; (3) the existence and infringement of a common law trademark; (4) passing off; and (5) false advertising. Complainant filed a petition for review. No other petitions for review or agency comments were received.

In February of 1985, the Commission determined to review certain issues raised by the ID, viz., direct infringement of '188 and '549 patents, contributory infringement of the '188 and '549 patents, and the existence and infringement of a common law trademark.

A notice requesting written comments on those issues and on the issues of remedy, the public interest, and bonding was published in the Federal Register on February 13, 1985 (50 Fed. Reg. 6072). The Commission received submissions from complainant SCSI and the Commission investigative attorney. No other submissions or agency comments were received.

Action

Having reviewed the record in this investigation, including the ID and the aforementioned written submissions, the Commission has determined to reverse the findings in the ID of no direct infringement of the '188 patent

and no contributory infringement of the '188 and '549 patents. The Commission has also determined to reverse the finding that there is a common law trademark in the appearance of complainant's flexible drill bit. Specifically, the Commission finds that complainant has not established a prima facie case of the existence of a common law trademark in the grooves on the flexible drill bit.

The Commission has determined to issue a general exclusion order prohibiting importation of flexible drill shafts that infringe claim 1 of Scoggins Manufacturing, Inc.'s '188 patent, except under license from or permission of complainant SMI. The Commission has also determined to issue two cease and desist orders prohibiting respondents Emergency Products Corp. and Alarm Supply Co., Inc., from false advertising and passing off. The cease and desist orders also prohibit selling from inventory on the basis of contributory and induced infringement of the '549 patent. The Commission also has determined that the public interest factors enumerated in sections 337(d) and (f) (19 U.S.C. § 1337(d) and (f)) do not preclude issuance of the aforementioned orders and that the bond during the Presidential review period should *be* in the amount of 420 percent of the entered value of the imported articles.

Order

Accordingly, it is hereby ORDERED THAT--

1. Flexible drill shafts that infringe claim 1 of U.S. Letters Patent 3,697,188 are excluded from entry into the United States, except (1) as provided in paragraph 4 of this order or (2) under license from or with the permission of the patent owner;

2 Emergency Products Corp. cease and desist from false advertising, passing off, and contributing to or inducing the infringement of claim 1 of U.S. Letters Patent 3,611,549, as provided in the attached cease and desist order;

3. Alarm Supply Co. Inc. cease and desist from false advertising, passing off, and contributing to or inducing the infringement of claim 1 of U.S. Letters Patent 3,611,549, as provided *in* the attached cease and desist order;

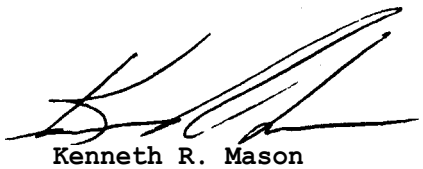
4. The flexible drill shafts ordered to be excluded are entitled to entry into the United States under bond in the amount of 420 percent of the entered value of the subject articles, from the day after this order is received by the President pursuant to subsection (g) of section 337 of the Tariff Act of 1930, until such time as the President notifies the Commission that he approves or disapproves this action, but, in *any* event, no later than 60 days after the date of such receipt;

5. Notice of this Action and Order shall be published in the Federal Register;

6. A copy of this Action and Order and the Commission Opinion issued in connection therewith shall be served upon each party of record in this investigation and upon the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and the Secretary of Treasury; and

7. The Commission may amend this Order in accordance with the procedure described in 19 C.F.R. S 211.57.

By order of the Commission.



Kenneth R. Mason
Secretary

Issued: June 20, 1985

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of CERTAIN APPARATUS FOR INSTALLING ELECTRICAL LINES AND COMPONENTS THEREFOR	Investigation No. 337-TA-196

COMMISSION OPINION

Introduction

On December 27, 1984, the presiding administrative law judge (ALJ) issued an ID (Order No. 5), finding two respondents, Emergency Products Corp. (EPC) and Alarm Supply Co., Inc. (AEC), in default and granting the motion of complainant Scoggins Manufacturing, Inc. (SMI) for summary determination of violation of section 337. 1/ The ALJ found violations of section 337 in the unauthorized importation and sale of certain apparatus for installing electrical lines and components therefor on the basis of induced infringement of U.S. Letters Patents Nos. 3,697,188 (the '188 patent) and 3,611,549 (the '549 patent), contributory infringement of the '188 patent solely by sales of the coupling device, infringement of complainant's alleged common law trademark, passing off, and false advertising. Complainant SMI subsequently filed a petition for review. No other petitions for review or agency comments were received.

1/ The ALJ found that respondent Ming Chang Carpenter Auger Bit Co., Ltd. (Ming Chang) was not in violation of section 337 because there was no evidence of imports by Ming Chang. Subsequently, SMI withdrew its complaint as to Ming Chang and Ming Chang was dismissed from this investigation. 50 Fed. Reg. 7970 (Feb. 27, 1985).

On February 5, 1985, the Commission determined to review the following issues raised by the ID:

> 1. Whether there is a violation of section 337 by reason of direct infringement of U.S. Letters Patent Nos. 3,697,188 and/or 3,611,549. In addition to the points raised in the petition for review, the Commission requests written submissions on whether in the absence of direct infringement, there can be contributory or induced infringement. The Commission also requests written submissions on the question of whether the drill apparatus is being imported separate and apart from the coupling device and, if so, what effect this fact should have on the Commission's determination regarding violation of section 337.
>
> 2. Whether there is contributory infringement of the flexible drill of U.S. Letters Patent 3,697,188.
>
> 3. Whether there is contributory infringement of the process patent, U.S. Letters Patent 3,611,549.
>
> On its own motion, the Commission has determined to review the issue of the existence and infringement of a common law trademark. The Commission will specifically examine whether in light of the recent decision of the Court of Appeals for the Federal Circuit in Textron, Inc. v. U.S. International Trade Commission, Appeal No. 84-1261 (January 24, 1985), complainant SKI has established prima facie evidence of secondary meaning of a common law trademark. If secondary meaning has not been established, the Commission wishes to be advised whether complainant desires a remand to the ALJ in order to submit further evidence on this issue.

The Commission decided not to review the ALJ's findings of induced infringement of the '188 and '549 patents, passing off, and false advertising, and requested submissions on remedy, the public interest, and bonding. Complainant and the Commission investigative attorney (IA) submitted written comments. No other comments were received.

After reviewing the ID and the written comments of complainant and the IA, we have determined to reverse the ALJ's findings of (1) no direct infringement of the '188 patent, (2) no contributory infringement of the '188

and '549 patents by the imported flexible drill shafts, and (3) the existence of a common law trademark. We have also determined to issue a general exclusion order and two cease and desist orders directed to respondents EPC and ASC, and to set a bond of 420 percent of the entered value of the articles concerned during the Presidential review period.

Background

On May 14, 1984, SMI filed a complaint alleging unfair methods of competition and unfair acts in the importation and sale of certain apparatus for installing electrical lines by reason of alleged: (1) direct, contributory, and induced infringement of the claims of the '188 and '549 patents; (2) infringement of complainant's common law trademark; and (3) false advertising. 2/ The complaint named as respondents (1) Canadian Flexi Drill (CFD) of Ontario, Canada, (2) EPC of New Jersey, and (3) ASC of Michigan. Subsequently, Ming Chang Carpenter Auger Bit Co., Ltd. of Taiwan (Ming Chang) was named as a respondent. Notice of the investigation was published in the Federal Register on June 20, 1984 (49 Fed. Reg. 25318).

On November 30, 1984, the ALJ issued an ID terminating respondent CFD on the basis of a consent order, and that ID was not reviewed by the Commission. On November 21, 1984, SMI filed a motion for summary determination on all issues in the investigation (Motion No. 196-5). The motion was supported in part by the IA. It was unopposed by respondents. In response, the ALJ itsued the ID under review granting complainant's motion for summary determination of violation of section 337.

2/ The complaint also contained an unfair competition count which, after consultation with complainant, was included in the notice of investigation as "passing off."

Subsequently, on January 8, 1985, complainant SMI filed a motion (Motion No. 196-6) to withdraw its complaint as to respondent Ming Chang and on January 16, 1985, the ALJ issued an ID (Order No. 6) granting the motion and terminating the investigation. Upon review of the ID, the Commission determined to terminate respondent Ming Chang, but not the investigation.

Unfair Methods of Competition

I. Patent infringement

There are two patents at issue in this investigation. The '188 patent covers the apparatus for installing electrical lines, i.e., the flexible drill shaft and the coupling means. The '549 patent is a method patent covering the method by which the apparatus is used to drill holes in inaccessible locations.

A. The initial determination

The ALJ found that the two patents in controversy are valid and that complainant is practicing both patents. The patented invention is a long, straight, flexible spring shaft which is attached to the end of a drill. This long, flexible shaft allows one to drill holes in inaccessible locations. Once the drill shaft has reached an accessible opening, an electrical line is attached to the drill through a hole in the bit. This can be accomplished either by tying a pull line or the electrical line to the tip of the shaft or by means of a detachable coupling device (sometimes referred to as a "wire grip"). The ALJ found the coupling device to be a necessary element of both claims 1 and 2 of the '188 patent and a necessary element of claim 1 of the '549 patent. 3/

3/ ID at 9.

The ALJ found induced infringement and contributory infringement of the '188 and '549 patents with respect to sales of the coupling device, 4/ but no direct infringement because the inventor in an affidavit failed to conclude that respondents' drills required the use of a separate coupling device (which, as noted, the ALJ found to be a required element in the first two claims of the '188 patent and in the '549 patent) and because the several affidavits filed **by complainant from wholesalers and consumers did not show that respondents' drills were sold with separate coupling devices. 5/ With respect to contributory infringement of the two patents at issue, the ALJ found such infringement only as to the coupling device, but not as to the flexible drill shaft because, in accordance with the '188 patent and the '549 patent, the drill shaft could be used without a coupling device and this was a "substantial noninfringing use" within the meaning of 35 U.S.C. S 271(c). 6/**

B. Infringement of the '188 patent

Claims 1 and 2 of the '188 patent state:

> **1. Apparatus for facilitating drilling of holes in wooden structural members oftentimes located in inaccessible areas and for installing electrical conductor lines in such members; said apparatus comprising a drill including a relatively short helical drill bit having a tapered portion on its trailing end, and a spring steel readily flexible straight shaft of much greater length than and of smaller cross-section than said drill bit and having one end fixedly secured to the tapered end of said drill bit, and coupling means detachably connected to one end of said drill and adapted for connecting an electrical conductor line thereto to be pulled through the drilled holes upon passing the drill through the holes in a direction away from said coupling means.**

4/ In its review brief, complainant SMI states that, contrary to the ALJ's finding, it does not assert infringement, contributory or otherwise, in respondents' sale of the coupling device alone. "To the best of complainant's knowledge, coupling devices are not imported . . . ." SMI Brief at 5.

5/ ID at 10.

6/ See discussion at pp. 7-8 of this opinion.

> 2. An apparatus according to claim 1, wherein said drill bit is provided with a transverse aperture therethrough adjacent its leading end, said coupling means comprising an attaching member extending through said aperture for attachment to said drill bit, a braided tubular member adapted for releasably and grippingly receiving an end portion of the electrical conductor line within one end thereof, and a swivel means interconnecting proximal ends of said members whereby said drill may be rotated relative to said braided tubular member without twisting an electrical conductor line grippingly received in the braided tubular member during rotation of the drill.

(Emphasis added.)

The ALJ determined that the coupling device was a required element in claim 1 because she construed the term "coupling means" in claim 1 to include only the coupling device. SKI argues that, contrary to the ALJ's finding, the coupling device is not a necessary element in claim 1 of the '188 patent because "a piece of ordinary wire or a pull line connecting the drill to an electrical line also would constitute coupling means." Therefore, SKI argues that sale of the flexible drill shaft alone is sufficient to prove direct infringement.

Although claim 1 does not limit "coupling means" to the specific coupling device, it does describe the "coupling means" as "detachably connected to one end of said drill and adapted for connecting an electrical conductor line . . • • " The specification of the '188 patent refers to only one "coupling means" that is detachable and adapted for connecting an electrical conductor line, i.e., the specific coupling device. Therefore, the ALJ is correct that the coupling device is a necessary element in the claims of the '188 patent.

More significantly, however, the ALJ stated in the ID that if there was evidence on the record showing that the drill shafts were sold with the wire

grips, the imported drill shafts would directly infringe the '188 patent. 7/ Contrary to the ALJ's finding, there is evidence that the drill and coupling device (wire grip) have been sold together. As complainant notes in its petition for review and in its review brief, Emmett Riggs, the owner of Marketex Security, stated in paragraph 5 of his affidavit that he bought the drill shaft and the coupling devices (referred to as the small and large wire grips in the affidavit and respondents' promotional material) together from respondent ASC. Since the Riggs affidavit establishes that the drill shaft and the coupling means have been sold together, there is direct infringement.

With regard to induced infringement of the '188 patent, 35 U.S.C. S 271(b) states "[w]hoever actively induces infringement of a patent shall be liable as an infringer." The ALJ found that respondents EPC and ASC had actively induced their customers to infringe the '188 patent by their sale and promotion of the "Snakebit" drill and by providing instructions for its use with the coupling device. The Commission determined not to review that issue.

With regard to contributory infringement of the '188 patent, 35 U.S.C. S 271(c) states:

> Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial - noninfringing use, shall be liable as a contributory infringer.

As complainant has noted and contrary to the ALJ's finding, the flexible drill shaft "necessarily is a material component, if not the material

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7/ The evidence on the record supporting the motion for summary determination were the answers of EPC and ASC to complainant's interrogatories and nine affidavits.

component, of the invention claimed in the '188 patent." Further, "[t]he flexible drill is not a staple article of commerce nor is there any suggestion that it has a non-infringing use." 8/ Use of the drill without the coupling means is not a "substantial" non-infringing use, especially when respondents' promotional material states that, to use the drill, a coupling means (wire grip) should be attached to the drill tip. 9/ We therefore determine that the ALJ's finding of no contributory infringement as to the drill shaft is clearly erroneous and must be reversed.

C. Infringement of the '549 patent

Claim 1 of the '549 patent states:

> 1. A method of installing a pliable line from an area outside of the confines of a hollow wall in and through the wall and at least one structural obstruction therein; said method comprising moving a drill having a springlike shaft with a drill bit secured to the leading end thereof through an access opening in one face of the wall while bowing the shaft to direct the drill bit along a path corresponding to the desired run of the pliable line, rotating the drill while applying a longitudinal force thereto to cause the drill bit to drill a hole through the structural wall obstruction in its path, ceasing rotation of the drill after the drill bit has reached an accessible area, connecting a pliable line to one end of the drill, and passing the drill through the drilled hole in a direction away from the pliable line to an area outside of the confines of the hollow wall to remove the drill from the wall while pulling the pliable line therewith to position a length of the pliable line extending through the hollow wall.

The '549 patent is a method patent covering the method by which the apparatus is used to drill holes in inaccessible locations. Because the '549 patent covers a method which is practiced by the ultimate consumer,

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8/ SMI Brief at 14.
9/ See SMI Exhibit 13.

complainant does not assert that any respondent wholesaler directly infringes the '549 patent. 10/ Direct infringement of the patented process, however, can be inferred by the sale of the flexible drill shafts and respondents' advertising which illustrates how to use the patented method. See Certain Personal Computers, Inv. No. 337-TA-140, 244 U.S.P.Q. 270 at 283 n.140. See also Shumaker v. Gem Mfg. Co., 311 F.2d 273 (7th Cir. 1962); Bergstrom v. Sears, Roebuck and Co., 496 F. Supp. 476, 493 (D. Minn. 1980); Spee-Flo Mfg. Corp. v. Gray Co., Inc., 255 F. Supp. 618, 620 (S.D. Tex. 1964), aff'd, Gray Co., Inc. v. Spee-Flo Mfg. Corp., 361 F.2d 489 (5th Cir. 1966).

In contrast to the situation with respect to the '188 patent, purchasers of the flexible drill shaft can infringe the '549 patent without using a coupling device because claim 1 of the '549 patent does not refer to "coupling means" as does the '188, patent, but instead to "connecting a pliable line to one end of the drill," including a pull line. The coupling device is not a necessary element in the '549 patent. The flexible drill shaft is also a material part of the patented process and not a staple article of commerce suitable for substantial noninfringing use.

10/ In its notice of review, the Commission requested briefing on the issue of whether in the absence of direct infringement there can be contributory or induced infringement. In response to this request, complainant has argued that as a matter of law there can be contributory or induced infringement, absent direct infringement, if direct infringement by consumers is legally cognizable under the patent law. Thus, in Aro Manufacturing Co. v. Convertible Top Replacement Co., 377 U.S. 476 (1964), the Supreme Court determined that where consumers, i.e., purchasers, of replacement automobile convertible tops were not direct infringers because they had an implied license, the sellers of the convertible tops were not guilty of contributory or induced infringement. In this case, however, since direct infringement by consumers of the patented method for installing electrical lines is a legally cognizable wrong, the sellers of the apparatus for use in the patented process can be guilty of contributory or induced infringement. See Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518 (1972); Dawson Chemical Co. v. Rohm & Haas Co., 448 U.S. 176 (1980).

Thus, we determine that, contrary to the ALJ's findings, respondents' sales of the patented flexible drill shafts constitute contributory infringement of the '549 patent under 35 U.S.C. S 271(c).

II. Common law trademark infringement

We determined to review the issue of whether complainant has established secondary meaning (to prove the existence of a common law trademark) in light of the recent CAFC decision, Textron, Inc. v. U.S. International Trade Commission, 753 F.2d 1019 (1985). Both complainant and the IA argue that a prima facie showing of secondary meaning has been made.

In the ID the ALJ found that the grooves on the flexible drill bit are a common law trademark because the grooves are not functional and have acquired secondary meaning. The ALJ also determined that the imported products infringed complainant's common law trademark.

To establish secondary meaning, complainant SMI must establish that a substantial number of the buyer group associate the mark with a single source. 11/ The evidence supporting secondary meaning is that complainant has sold drills with grooves on the bits since 1979 and has had a significant sales volume. The product also has been advertised, but the ALJ found that "it is not clear how many advertisements showed the grooves on the bit." 12/ The primary evidence relied on by the ALJ to establish a prima facie case on secondary meaning is five affidavits. The ALJ concluded: "[T]here is information that the mark, although not distinctive (arbitrary or fanciful),

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11/ McCarthy, Trademarks and Unfair Competition at S 15:11.; see Restatement, Torts S 727, Comment C (1938); Aloe Creme Laboratories Inc. v. Milsan, Inc., 423 F.2d 845, 850 (5th Cir. 1970); Food Fair Stores, Inc. v. Lakeland Grocery Corp., 301 F.2d 156 (4th Cir. 1962). See also Kellogg Co. v. National Biscuit Co., 305 U.S. 111, 118 (1938).

12/ ID at 16.

has acquired a secondary meaning associated with complainant, at least among, some of the purchasers of such a drill." 13/ The U.S. Court of Customs and Patent Appeals (one of the predecessor courts of the U.S. Court of Appeals for the Federal Circuit) (per Judge Rich), however, has held that adequate proof of secondary meaning means more than evidence of a "relatively small number of people" who associate the mark with one source. 14/

In the Textron case, the CAFC held that Textron had not established secondary meaning because, although it had conducted a survey (which was not conducted in this case), the survey did not establish that a substantial number of the survey respondents identified certain aspects of the vertical milling machine with a single source. 15/

In this case the relevant buyer group is composed of electricians who install electrical lines in buildings, including lines for telephone systems, burglary alarm systems, fire alarm systems, and related security alarm systems. Of the five affidavits submitted to establish secondary meaning, two are from the presidents of wholesale companies. One prominent authority has stated: "The conclusory testimony of dealers and wholesalers as to consumer recognition is often characterized as of 'little value,' since it may be biased and does not necessarily reflect the views of the consumer class." 16/

The other three affidavits are from an employee of a tool company, an expert in the security/alarm installation business, and an installer of alarm

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13/ ID at 17 (emphasis added).

14/ Roselux Chemical Co. v. Parson Ammonia Co., 299 F.2d 855, 862 (C.C.P.A. 1962); McCarthy, Trademarks and Unfair Competition at S 15:14.

15/ 753 F.2d at 1027.

16/ McCarthy, supra, at S 15:13; see Application of Meyer & Wenthe, Inc., 267 F.2d 945 (C.C.P.A. 1959); Gimix, Inc. v. JS & A Group, Inc., 699 F.2d 901 (7th Cir. 1983); Application of Duvernoy & Sons, Inc., 212 F.2d 202, 203 (C.C.P.A. 1954).

systems. Three affidavits from three possible members of two buyer subgroups do not establish a prima facie case that a substantial number of the buyer group associate the grooves on the drill bits with a single source. This is especially true where complainant has made well over 10,000 sales annually in the last three years.

With regard to advertising, the CAFC stated:

> Although Textron has pictured the silhouette of the Bridgeport machine in its operator's manuals and certain promotional activities, it has not proffered evidence showing that these promotions focused buyers' attentions on the shape of the machine or that the design of the column and ram was featured in any way. 17/

The only SMI advertising placed in evidence was a photocopy of one printed advertisement. That photocopy does not even picture the drill shaft. Thus, there is no evidence that there has been substantial advertising showing the grooves on the drill bit or that the advertising focused buyers' attention on the grooves on the flexible drill shaft. 18/

In the primary case relied on by SMI, In re Industrial Working Machine Corp., 201 U.S.P.Q. 953 (PTO TTAB 1979), 20 letters from consumers in the relevant buying group had been entered into evidence to prove that the word "INDUSTRIAL" had achieved secondary meaning. More significantly, however, the advertising had featured the word "INDUSTRIAL" in block letters and had placed the letters TM next to the "INDUSTRIAL" mark. In this case, there are only five affidavits, three of which are from the relevant consumer group, and no evidence that the advertising emphasizes the mark.

17/ 753 F.2d at 1027.

18/ The IA's argument that secondary meaning has been established is based on the five affidavits, not the advertising. The IA admits: "While the record contains evidence regarding advertising expenditures, there is no evidence in the record as to the manner and extent of advertising of the mark." IA Brief at 14.

In light of the above discussion, we have determined to reverse the ALJ and find that there is no common law trademark because complainant has failed to provide prima facie evidence of secondary meaning. 19/

Remedy

Complainant requests (1) the issuance of a general exclusion order prohibiting the importation of flexible drill shafts which contributorily infringe the '188 and/or the '549 patents and (2) the issuance of cease and desist orders against respondents EPC and ASC prohibiting them from directly infringing the '188 patent, inducing infringement of the '188 and/or '549 patents, false advertising, passing off, and common law trademark infringement. 20/

With regard to the general exclusion order, the criteria in Certain Airless Paint Spray Pumps and Components Thereof, Inv. No. 337-TA-90, USITC Pub. 1199 (1981), are met. A widespread pattern of unauthorized use and unauthorized importations from two foreign sources has been established. 21/ Further, although there is no evidence that respondent Ming Chang, a third foreign source, has exported the infringing drill to the United States, it has advertised the drills for sale in this country. More significantly, evidence has been established of business conditions from which one might reasonably infer that foreign manufacturers other than respondents may attempt

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19/ In response to the question of whether complainant desires a remand to prove secondary meaning, SMI stated: "Since any additional evidence on the existence of secondary meaning would be cumulative of the evidence already of record, complainant believes remand for the purpose of taking such additional evidence is unnecessary . . . ." SMI Brief at 32.

20/ The IA recommends a general exclusion order but not cease and desist orders.

21/ See SMI Brief at 33.

to enter the U.S. market with infringing articles. Scoggins exh. C, pp. 2, 4, 8-9, SKI exh. A (exh. 15-16) to Scoggins motion for summary determination. The cost of production of the flexible drill for foreign manufacturers is low. As SMI stated in its brief:

> Virtually any machine shop having a drill grinder and induction welding equipment can produce the product (Scoggins Affidavit, 1 46). The manufacturing cost is only about 10% of the sales price and raw material cost about 15%.

There is an established demand for the flexible drill shafts in the United States. As evidenced by the activities of respondents EPC and ASC, marketing and distribution networks are readily available for potential foreign manufacturers.

SMI, however, has asked for issuance of an exclusion order and cease and desist orders. The Commission has issued an exclusion order and cease and desist orders in Certain Airtight Cast-Iron Stoves, Inv. No. 337-TA-69, USITC Pub. 1126 (1981); Certain Molded-In Sandwich Panel Inserts and Methods for Their Installation, Inv. No. 337-TA-99, USITC Pub. 1246 (1982); and Certain Plastic Food Storage Containers, Inv. No. 337-TA-152, USITC Pub. 1563 (1984). These were investigations where the Commission found more than one unfair act.

In this case, SMI requests a general exclusion order covering contributory infringement of the '188 and '549 patents and cease and desist orders issued to respondents EPC and ASC prohibiting direct infringement of the '188 patent, induced infringement of the '188 and '549 patents, false advertising, and passing off. SMI argues that the cease and desist orders should extend not only to unfair advertising, passing off, and induced infringement, but should also prohibit respondents EPC and ASC from selling any imported flexible drills in their inventory. SMI argues that, if

respondents are allowed to "sell off" this inventory, it would cause lost sales to SMI of "about $62,000" at current retail prices.

The IA recommends that cease and desist orders should not be issued in this case because the record is devoid of any evidence that respondents imported infringing drill bits after institution of the investigation, and because the present inventory of imported drill bits is believed to be quite small. Based on answers to interrogatories, respondents EPC and ASC had 3,013 drill bits in inventory as of June, 1984. The IA goes on to state: "This figure is much. less than what respondents used to purchase from complainant on a monthly basis (more than 3,000 per month from 1980 through 1983). 22/ Scoggins Exh. A. par. 37." The IA also based his recommendation on informal oral representations made by respondents. 23/

SMI replies that the 3,000 per month figure sold by complainant to respondents represented dollar sales, not unit sales. Using the IA's figure of $19.54 as the average price per drill bit, SMI states that the 3,013 units would represent gross sales of $58,874 and enough inventory to last well into 1986. Further, respondents have refused to provide current and precise information on their inventory and possible importations made during the course of this investigation. Finally, SMI argues that, since respondents EPC and ASC have defaulted, the burden of demonstrating the absence of such inventory and the cessation of importation rests on them.

We agree with SMI and find that there is evidence on the record that respondents have a substantial inventory of infringing drill shafts. Furthermore, the fact that respondents have defaulted and refused to provide

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22/ IA Brief on remedy, bonding, and the public interest at 3.
23/ Id.

any further evidence on their inventory should not prevent the issuance of cease and desist orders in this case.

On the basis of the evidence in the record, we have determined to issue a general exclusion order based on direct, contributory and induced infringement of the '188 patent, and cease and desist orders prohibiting respondents EPC and ASC from passing off and false advertising. 24/ The cease and desist orders also prohibit selling from inventory based on contributory and induced infringement of the '549 patent.

Public Interest

We have determined that an exclusion order and cease and desist orders described above will not have an adverse impact on the public interest. 25/ There are alternative ways of installing electrical lines, although perhaps less convenient, and complainant has sufficient production capacity to meet domestic demand for its product.

24/ Vice Chairman Liebeler notes that the use of cease and desist orders to prohibit a purely domestic activity raises important policy and jurisdictional-issues. Under section 337, the Commission is charged with remedying "unfair acts in the importation of articles . . . or in their sale . . . ." Since the addition of the cease and desist order to its arsenal of remedies, the Commission has decided cases involving such unfair acts as false advertising and passing off, performed solely by a domestic importer. These unfair acts begin and end completely within the borders of the United States. The only connection to international trade is that the product is imported. Apparently there is no need that the unfair act be connected to the importation at all. It could follow from this false advertising or unfair competition by a foreign dealer in Detroit could be the subject of a section 337 investigation. The Commission may have concurrent jurisdiction with the Federal Trade Commission, federal district courts and state courts over unfair competition. On the other hand, it may be that the commission should refuse to adjudicate such questions, either on policy or jurisdictional grounds. I reserve judgment on this matter and encourage parties to address this question in an appropriate future case.

25/ Section 337(d), 19 U.S.C. S 1337(d).

Bondinc

We have determined to set a bond of 420 percent of the *entered* value of the imported articles in order to offset any competitive advantage arising from respondents' unfair method of competition. The figure is based on a comparison of the prices at which EPC and ASC obtained infringing products from Taiwan with Scoggins' wholesale prices.

PUBLIC VERSION

UNITED STATES INTER4floWTTIADE COMMISSION M5- 7 L: 2c)
Washington, D.C.

In the Matter of

CERTAIN APPARATUS FOR INSTALLING) Investigation No. 337-TA-196
ELECTRICAL LINES AND COMPONENTS)
THEREFOR

INITIAL DETERMINATION FINDING TWO RESPONDENTS IN DEFAULT AND GRANTING IN PART COMPLAINANT'S MOTION FOR SUMMARY DETERMINATION (ORDER NO. 5)

On November 21, 1984, complainant Scoggins Manufacturing, Inc. (SMI) filed a motion for summary determination on all issues in this case (Motion No. 196-5). The motion is supported in part by the Commission investigative attorney. It is unopposed by respondents.

Three respondents were named initially in the notice of investigation, and a fourth respondent was added later. The investigation has been terminated. as to one respondent, Canadian Flexi Drill, as a result of a consent order agreement (Order No. 6).

The remaining respondents are:

1. Emergency Products Corp., (EPC), a New Jersey corpbration,
2. Alarm Supply Co., Inc., (ASC), a Michigan corporation owned by EPC, and
3. Ming Chang Carpenter Auger Bit Co., Ltd., a company in Taiwan.

A. JURISDICTION

The Commission has subject matter jurisdiction over the alleged unfair acts in connection with the importation of certain apparatus for installing electrical lines and components thereof.

The Commission has personal jurisdiction over EPC and ASC because they are domestic corporations and have been served with the notice of investigation.

Complainant has not established personal jurisdiction over Ming Chang Carpenter Auger Bit Co., Ltd. There is no information that Ming Chang has exported any apparatus for installing electrical lines into the United States, although it has disseminated a catalogue in the United States advertising such apparatus (Eckerd affidavit). Neither complainant nor the investigative attorney has shown that Ming Chang received actual notice of the complaint and notice of investigation or that Ming Chang has established "minimum contacts" with the United States to support a finding that it is doing business here. ender Insurance Corp. of Ireland v. Compagnie des Bauxites de Guinee, 456 U.S. 694 (1982), it is relatively simple to establish personal jurisdiction over a foreign respondent who fails to answer discovery reauests, but no effort has been made to establish the basic facts necessary to support personal jurisdiction over this respondent. Since no violation of Section 337 by Ming Chang was shown in affidavit form, however, it would serve no purpose to obtain personal jurisdiction over this respondent for the purpose of this motion.

B. TWO RESPONDENTS ARE IN DEFAULT

None of the above respondents has filed a response to the complaint. In addition, EPC and ASC have failed to comply with Order No. 2, and have indicated that they do not intend to litigate this case. EPC and ASC therefore are found to be in default.

Although in default, EPC and ASC have filed answers to the interrogatories of the Commission investigative attorney. These answers are not sworn, and they cannot he relied upon to support the motion for summary determination.

All three respondents were alleged to have violated Section 337 in the unlawful importation of certain apparatus for installing electrical lines and components by reason of direct, contributory and induced infringement of the claims oC U.S. Patent No. 3,697,188 and contributory and induced infringement of the claims of U.S. Patent No. 3,611,549, as well as infringement of complainant's common-law trademark, false advertising, and passing off, all of which had the effect or tendency to destroy or injure substantially an efficiently and economically operated domestic industry.

Under the Commission's new default rule, Section 210.25, the Commission shall issue relief against a respondent found to he in default only if the record developed by the administrative law judge establishes a prima facie case of violation of Section 337 or reason to believe there is a violation of Section 337. (The "reason to believe" clause probably was intended to relate only to a request for a temporary exclusion order.)

A "prima fac4e case" is defined in Black' Law Dictionary as "such as will suffice until contradicted or overcome by other evidence," and "a case which has proceeded upon sufficient proof to that stage where it will support finding if evidence to contrary is disregarded."

The new default rule appears to be inconsistent with Section 210.50, the summary determination rule. Under Section 210.50, summary determination shall he rendered if the pleadings and any depositions, admissions on file, and affidavits show that there is no genuine issue as to any material fact and that the moving party is entitled to a summary determination as a matter of Jaw.

The original purpose of the summary determination rule (which is derived from Rule 56 of the Federal Rules of Civil Procedure) was to identify issues as to which there is no genuine issue of material fact in a contested case so those issues will not have to he tried, and to decide in favor of the moving party or such issues if that party is entitled to summary determination as a matter of law. To accomplish this, the moving party can offer affidavit-, for example, signed by witnesses competent to testify at trial. The opposing party then is required to produce opposing affidavits, so that the issue can go to trial. If the affidavits of the moving party are unopposed, no genuine issue of material fact can he found. Under Section 210.50, the moving party then would he entitled to judgment in his favor on that issue, if the facts stated in his affidavits show that -he is entitled to summary determination as a matter of law. In a contested case the opposing party can he relied upon to

submit an opposing affidavit on those issues as to which there is a genuine issue of material fact. In a default case, however, there is no opposing party, and complainant should always win, if the rule is read literally.

In a default case in district court, usually the plaintiff simply wins when the defendant is found to he in default, and a motion for summary judgment under Rule 56 is not reached. A district court, however, frequently will reopen the case for trial if the defendant later appears and wants to contest the default judgment. The Commission does not follow this practice. It refuses to grant relief in a default case in the absence of "prima facie evidence" of violation of Section 337.

If the summary determination rule is read literally, the defaulting party should lose, based solely on its failure to submit opposing affidavits. It is these opposing affidavits in a contested case that weed out the issues that do present genuine issues of fact and send these issues to trial. Without these opposing affidavits, there is little or no way to verify the truth or completeness of the facts stated in the moving party's affidavits. Ordinarily, affidavits alone would not be admissible at trial. In a motion for summary determination, they merely show that complainant has a witness competent to testify and that this witness is expected to testify as to certain facts at the trial. In no sense does the affidavit itself automatically become admissible evidence or sworn testimony, nor is it part of the "evidentiary record." Affidavits are not "prima facie evidence" of violation of Section 337.

The Commissien's requirement of prima facie evidence of a Section 337 violation in a default case is not satisfied by unopposed affidavits submitted in a motion for summary determination, nor are affidavits submitted by the complainant in an uncontested case a satisfactory way of obtaining a reliable record.

Even though Section 210.50 has not been revised to be consistent with the default rule, it may he possible to construe Section 210.50 in a manner that accomplishes what the Commission appears to want to do. (If this is done, Section '/.10.50 will hear little resemblance to its model, Rule 56 of the Federal Rules, and, regrettably, cases decided'under Rule 56 no longer would be useful in construing Section 210.50.) Under such a construction of Section 210.50, in a default case a determination could he made as to whether the facts as stated in depositions or affidavits or other sworn statements would have supported a prima facie *case* if the case had gone to trial, and sworn testimony had been received in evidence. Nothing else (such as deemed admissions resulting from the failure to answer requests for admissions) would he considered.

Since this is a default case, this construction will be given to Section 210.50 here, although it eviscerates this rule. The facts stated in complainant's affidavits will he accepted as true for the purposes of this motion, except when the facts stated are inconsistent with other facts stated in these affidavits, or are incredulous on their face.

C. THE -TWO PATENTS ARE VALID AND PRACTICED BY COMPLAINANT

Under 35 U.S.C. §282, a United States patent shall he presumed valid. That presumption places the burden of proving invalidity on a party asserting it. No party has challenged the validity of either the '188 patent or '549 patent, both of which have been assigned to complainant SMI (Scoggins affidavit, para. 11, SMI Ex. 5 and SMI Ex. 6). Both patents are in full force and effect, and no court has declared either to he invalid or unenforceable (Scoggins affidavit, para. 12).

Since no party challenges the validity of either patent, both the '188 and '549 patents are found to he valid based on the presumption of validity. No information has been offered to show that either patent is unenforceable.

Complainant is practicing both claims of the '188 patent, and complainant's customers are practicing the method *set* forth in at least claim 1 of the '549 patent.

The claims of the '188 patent read as follows:.

> 1. Apparatus for facilitating drilling of holes in wooden structural members oftentimes located in inaccessible areas and for installing electrical conductor lines in such members; said apparatus comprising a drill including a relatively short helical drill hit having a tapered portion on its trailing end, and a spring steel readily flexible straight shaft of much greater length than and of smaller cross-section than *said* drill hit and having one end fixedly secured to the tapered end of said drill bit, and coupling means detachably connected to one end of said drill and adapted for connecting an electrical conductor line thereto to be pulled through the drilled holes upon passing the drill through the holes in a direction away from said coupling means.
>
> 2. An apparatus according to claim 1, wherein said drill hit Is; provided with a transverse aperture therethrough adjacent its leading end, said coupling means comprising an attached member

extending through said aperture for attachment to said drill hit, a braided tubular member adapted for releasably and grippingly receiving an end portion of the electrical conductor line within one end thereof, and a swivel means interconnecting proximal ends of said members whereby said drill may be rotated relative to said braided tubular member without twisting an electrical conductor line grippingly received in the braided tubular member during rotation of the drill.

The '549 patent is a method patent with 1() claims. Claim I of the '549 patent reads as follows:

> 1. A method of installing a pliable line from an area outside of the confines of a hollow wall in and through the wall and at least one structural obstruction therein; said method comprising moving a drill having a spring-like shaft with a drill bit secured to the leading end thereof through an access opening in one face of the wall while bowing the shaft to direct the drill hit along a path corresponding to the desired run of the pliable line, rotating the drill while applying a longitudinal force thereto to cause the drill hit to drill a hole through the structural wall obstruction in its path, ceasing rotation of the drill after the drill bit has reached an accessible area, connecting a pliable line to one end of the drill, and passing the drill through the drilled hole in a direction away from the pliable line to an area outside of the confines of the hollow wall to remove the drill from the wall while pulling the pliable line therewith to position a length of the pliable line extending through the hollow wall.

The flexible drill apparatus of complainant SMI includes a drill component (see SMI Phys. Ex. A) having:

(1) a short helical drill hit having a tapered portion on its trailing portion;

(2) a long, straight,flexihle spring shaft which is of smaller cross section than the drill hit and is attached to the tapered end of the drill hit; and

(3) two transverse holes, one passing through the tip of the drill hit and another passing through the end of the drill. Coupling can he achieved by attaching the wire to the drill but is "greatly facilitated" by a coupling device (see SMI Phys. Ex. B) which has a snap fastener which will pass through either hole in the drill, a braided wire tube for gripping the electrical line and a swivel joining the attaching member and the braided wire tube (Scoggins affidavit para. 10 (iii) and 13). The coupling device, which is a necessary element of both claim 1 and claim 2 of the '188 patent, is sold separately because the same coupling device can he used with a large number of models of flexible shafts. Although this device is sold separately, it is usually used with the drill component, and when used therewith, all of the parts constitute apparatus covered by claims 1 and 2 of the '188 patent.

This apparatus usually is utilized by SMI customers in the following manner:

A hole is first drilled with the drill from one accessible entry or opening in a hollow wall or floor through an otherwise inaccessible structural ohstruction(s) in the wall or floor, such as a stud, joist or plate. The length and flexibility of the spring shaft of the drill permit bowed drilling (drilling in various axes which are transverse to the axis of rotation of the drill motor).

When the drill hit has formed a hole in one or more of the inaccessible structural obstructions and has reached a second accessible opening, an *electrical* line is attached to the drill through the hole in the bit (or the hole *in* the end of the spring shaft). This can he accomplished, for example, ny means of the detachable coupling device or grip described above.

Removal of the drill, either by reversing the drill (in which case the eleCtrical line would have been attached through the hole in the drill hit) or by pulling the drill bit out in the same direction (in which case the electrical line would have been attached through the hole in the end of the spring shaft), feeds the electrical line through the hole drilled in the otherwise inaccessible obstruction.

After passage of the line through the wall, the line, coupling device, and -?rill are separated from one another, leaving the electrical line installed in the wall, floor or ceiling (Scoggins affidavit para. 5, 7 and 8).

D. INFRINGEMENT

Complainant assumes that ASC acts under the control of its parent EPC, so that a violation on the part of ASC is a violation by EPC.

The EPC/ASC "Snakebit" drill (see SKI Phys. Ex. 3 and Appendix H) has all the features of the flexible drill ..recited in both claims of the '188 patent, except the coupling device.

Mr. Pope, the inventor, examined the "Snakehit" drill but did not state that it directly infringed his patents. He stated that the "Snakehit" drill performs the same function in the same way and accomplishes the same result as

his "invention" (Pope affidavit para. 7). He defined his invention as the method and apparatus described and claimed in the '188 patent and the '549 patent (Pope affidavit para. 3-5 and 7). Mr. Pope failed to conclude that his patents are literally or directly infringed. He also failed to find that respondents' drills required the use of a separate coupling device. Without that separate coupling device, the flexible drill alone does not infringe claim 1 or claim 2 of the '188 oatent directly or under the doctrine of equivalents.

When literal infringement is not found, the doctrine of equivalents sometimes can he used to establish infringement. Under this doctrine, an allegedly infringing product may he found to infringe a claim if it performs substantially the same function in substantially the same way to obtain the same result. Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 95 USPQ 328 (1950). The Supreme Court in Graver Tank noted that equivalence is "not the prisoner of a formula and is not an absolute to be considered in a vacuum. It does not require complete identity for every purpose and in every respect." 85 USPQ at 330-331.

Here, however, equivalence cannot be found in the absence of a separate coupling device. The '188 patent specification indicates that the separate coupling *device is necessary when* a wire of large dimensions is used, because the hole in the bit must remain small so as not to weaken the bit. The coupling device allows a large wire to he attached to the small hole in the hit. (Column 5, lines 24-46, '198 patent, SMI Ex. 3 to Scoggins affidavit.)

This appears to be an essential part of the invention and is separately required in the claims. The equivalent of the separate coupling means for larger wire is not found in the "Snakehit" drill when sold without the separate coupling means or in Mr. Pope's affidavit in which he finds that this drill performs the same function in the same way and accomplishes the same result as his invention as claimed in the '188 patent. Compainant has not offered adequate information in affidavit form to support a finding that respondents' drills when sold alone infringe the '188 patent under the doctrine of equivalents.

There is information in affidavit form indicating that the "Snakehit" drill is offered for *sale with* wire grips (detachable or attachable coupling means). (See Scoggins affidavit, para. 29 and 32.) If the drills were sold with the wire grips, the drills would infringe the '188 patent. It is likely that this has occurred but the affidavits do not show this.

Under 35 USC i271(b), the active inducement of others to infringe a patent constitutes infringement. ASC and EPC induce others to infringe claims I and 2 of the '188 patent by selling the "Snakebit" drill and coupling device, even though they may he sold separately. Both ASC and EPC are aware that at least sometimes these devices will he used together, since the coupling *device* has no other apparent use, ASC previously purchased similar equipment from complainant and was aware of its intended use (see Scoggins affidavit para. 36), and ASC recommends the use of the coupling device in its promotional material, telling purchasers how to use it. (SMI Ex. 13 to the Scoggins affidavit.)

Complainant offers an affidavit indicating that ASC and EPC also actively induce others to infringe the method claimed in at least claim I of the '549 patent in its promotional material by describing how to utilize the "Snakehit" drill for. installation of electrical lines. (See Pope affidavit, para. 5, and SMI Ex. 13 to Scoggins affidavit.) Infringement of the '549 patent is shown because the ASC material cited describes the use of a separate coupling *device,* the "D'versiGRIP."

Under 35 USC i271(c), the sale either of a component of a patented machine cr of an apparatus for use in practicing a patented process, knowing the same to he especially made or especially adapted for uee in an infringement of the patent and not a staple article or commodity of commerce suitable for substantial non-infringing use, constitutes contributory infringement.

ASC and EPC therefore contrihutorily infringe the '381 patent when ASC or EPC sells wire grip coupling devices alone. Wire grips are sometimes sold by ASC separately from the flexible drills (Riggs affidavit para. 5).

The "Snakehit" flexible drill when sold by itself by EPC and ASC is a necessary component of the apparatus claimed in the '188 patent and probably was intended primarily to be used in a manner that would infringe the '549 method patent, but there is a non-infringing use for this drill since a wire with a small diameter can be attached to the hole in the hit without using a separate coupling device (Column 5, lines 24-46, '188 patent, SMI Ex. 3 to Scoggins affidavit). The drills therefore can be described as a commodity of

commerce suitable for a substantial non-infringing Lige, and contributory infringement has not been shown 'with, respect to sales of the flekihle drill alone.

E, COMMON-LAW TRADEMARK

A common-law trademark is a word, symbol or device, or any combination thereof, adopted: and,used by a manufacturer or merchant to identify his goods and to distinguish them from those manufactured or sold by others. In re Certain Vertical Milling Machines, 337-TA-133, 223 USPQ 334 at 336 (1984).

Anyone claiming a common-law trademark must'establish that (1) he has the right to use the mark and-(2) the mark is either' distinctive or has act:mired secondary meaning.: The mark cannot he functional, but there is no *need* that the claimed mark he originally adopted with the'intent that it identify the source of the goods. In re Certain Vertical Milling Machines, supra, 223 USPQ at 336.

Since EPC was selling SMI products before it began to sell the "Snakehit," and since there As no significant difference in the appearance of complainant's and respondents' drills, it seems likely that EPC copied SMI's product. This alone is not an unfair act.

There is a general right to copy articles that are in the publid domain and unprotected by patent or other federal laws. Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964), and Compco Corp. v. Day-Brite Lighting, Inc, 376 U.S. at 232.

complainant, however, has shown more than mere copying. It has shown that it probably can establish at trial that it has a right to use grooves on a flexible drill bit as a trademark since it was the first to do so, that this mark has acquired secondary meaning associated with complainant, and that the mark is not "functional" as that term is defined by the Federal Circuit.

Complainant's flexible drills were originally designed by DMM. Having acquired all the assets of DMM, complainant Scoggins (SMI) has a right to all trademark rights of DMM, including both common-law trademarks and registered trademarks (Scoggins affidavit, para. 10(iii)J. SMI has engaged in extensive advertising subsequent to the acquisition from DMM (Scoggins affidavit, para. 22), and SMI enjoys a high reputation for quality (Scoggins affidavit, para. 35). There is no information presented here that any other entity has rights that would defeat SMI's rights in any trademark.

The grooves on SMI's flexible drill are not functional. It is apparent from the bits of Canadian Flexi Drill (SMI Phys. Ex. D) that the same purpose can be achieved with alternative designs, without the grooves on the bit.

It was originally thought by DMM that these serrations or grooves gave the bit a screw effect to assist in pulling it through wood. Further study by SMI has suggested that such effect is minimal or non-existent. SMI has considered eliminating the grooves from its product (since grooves add to the cost) but has not done so because SMI believes that the trade has come to associate this feature with SMI's products (Scoggins affidavit, para. 31). The unnecessary grooves on the bit of the EPC and ASC imported drills thus

duplicate the appearance of SMI's bits, even though other designs could have been used. In Morton-Norwich, the Federal Circuit held that if it found (1) that the same functions could he performed by a variety of other shapes without sacrifice of any functional advantage, and (2) that if competitors were precluded from using the trademark, effective competition would still be possible, the mark would not he functional and could be protected. In re Morton-Norwich Products, Inc. 671 F.2d 1332, 213 USPQ 9, 17 (CCPA 1982). Complainant's claimed trademark meets this test and the grooves are found not to be functional.

Complainant has sold drills with grooves on the bits since 1979, and has had significant sales volume. The product has been advertised but it is not clear how many of the advertisements showed the grooves on the hit. With the exception of the imported drills that have copied this feature, there is no information that any other firm has sold any drills having this feature. Complainant probably could establish through evidence at trial that the drills with grooves on the bit have acouired secondary meaning associated with SMI (Scoggins affidavit, para. 28, 35 and 40). Affidavits from several customers who indicate that they associate the grooves on the hit with SMI products have been submitted (Affidavit and supplemental affidavit of Steve Eckerd, Harberg affidavit, Rick affidavit, Sanger affidavit, and Rudd affidavit).

Complainant has produced information in affidavit form indicating that it probably could make a prima facie case that it has a common-law trademark in

the appearance of the grooves on its flexible drill bits. Complainant appears to have a prior right to use the grooves as a trademark on flexible drill bits, there is no information that the mark has been abandoned, there is information indicating that the mark is not functional and that flexible drill hits without these marks can function just as well as those with them, and there is information that the mark, although not distinctive (arbitrary or fanciful), has acquired a secondary meaning associated with complainant, at least among some of the purchasers of such drills.

To rake a prima facie case of infringement of complainant's common-law trademark, complainant must show a likelihood of confusion among those who would be likely to purchase flexible drill bits from complainant when they see respondents' flexible drill bits offered for sale and these bits have grooves on them.

The drill hits imported by EPC and CSC are virtually identical in appearance to complainant's hits. Neither the hits nor the drills disclose a brand name or manufacturer's name. Drills of this type are generally sold without special packaging, and are sent in simple tube mailers (Scoggins affidavit, para. 11). The name of the sender probably is disclosed on the tube, but even if it is, the purchaser might think that the sender was the dealer or distributor rather than the manufacturer. This alone would not provide adequate information as to the name of the manufacturer or the source of the product. The Scoggin's affidavit relates two incidents in which purchasers told Scoggins that they were confused as to the source of the

"Snakehit" drill (.Scoggins affidaVit, para. 35 and 40). In addititm, several affidavits have been submitted that indicate that a potential purchaser of flexible drill bits probably would he confused as to the Manufacturer of the bits if they saw such hits with grooves on them and the hits were not made by complainant (Harberg affidavit, Rick affidavit, Sanger affidavit and Rudd affidavit).

Complainant has submitted enough information in affidavit form to indicate that it probably could offer evidence'to support a prima facie violation of Section 337 because of infringement of complainant's common-law trademark by respondents ASC and EPC.

F. PASSING OFF

!tarty' courts have held that "passing off" requires only proof of an intent to lead the purchaser to believe that he is acquiring another company's product. No proof of secondary meaning or likelihood of confusion is required. "Passing off" will he given this construction here. One company can attempt to pass off its products as those of another even if notrademark is involved. Proof of secondary meaning is irrelevant unless passing off is accomplished by trademark infringement.

Respondents EPC and ASC intentionally passed off their drills as being those of complainant. When EPC introduced the new "Snakebit" drill in April of 1981, it not only stated that it was a "replacement" for complainant's drill, it adopted the arbitrary model numbers used to identify complainant's products (Scoggins affidavit, para. 29 and 32, SMI Ex. 5). Many customers

place their order!, by model number, so that if a person had purchased complainant's Model 173 from EPC prior to 1981 and then reordered "Model 173" from ASC or EPC after April 1981, he would have received the "Snakehit" instead of complainant's product. Some purchasers who thought they were receiving complainant's products in fact were receiving those of EPC and ASC (Scoggins affidavit, para. 35 and 40, SMI Ex. 10 and'12).•

G. FALSE ADVERTISING

EPC (and subsequently ASC after acauisition by EPC) apparently have used a photograph of complainant's drill that appeared in EPC's 1981 catalogue (SMI Ex. 7). In EPC's subsequent 1982 catalog (SMI Ex. 9) the same photograph is associated with respondents' "Snakehit" (with the addition of the stylized outline of a snake). The Scoggins affidavit states that 'the two photographs have the same origin; they have the same angle of shading and highlighting, the same position of that shading and highlighting relative to the depicted components, and the hit is in the same position. The photograph that EPC/ASC supplied with its answers to interrogatories is described as being identical to the photograph of complainant's product appearing in catalogue "E81," (with the addition of what appears to he a hand-drawn extension of the flexible shaft). The use of a photograph of SMI's product in EPC and ASC's catalogues constitutes false advertising and an attempt to pass off the imported products as being those of SMI.

ASC also used SMI's promotional material concerning the use of the apparatus in its catalogue (see Scoggins affidavit, para. 42, SMI Ex. 13, SMI

Ex. 14 and Pope Affidavit). EPC and ASC have adopted and used complainant's promotional material deceptively for their own benefit.

SMI also alleges that Ming Chang has infringed complainant's common-law trademarks, and engaged in false advertising and passing off. In the absence of any potential *evidence* that Ming Chang has exported the apparatus in issue to the United States, complainant has not established the likelihood of a Section 337 violation on the part of Ming Chang.

H. THERE IS AN EFFICIENTLY OPERATED DOMESTIC INDUSTRY

The domestic industry has been defined by the Commission in patent cases as that part of the facilities of the patentee and his licensees devoted to the lawful manufacture and sale of products covered by the patents in issue. (See Schaper Manufacturing Co. v. U.S.I.T.C., 717 F.2d 1368 (Fed. Cir. 1983).)

The relevant domestic industry in this case therefore consists of the facilities of complainant and its licensees in the United States devoted to the production, promotion and sale of apparatus for installing electrical lines (flexible drill apparatus) covered by the patents in issue. The domestic industry will he defined in the same way in connection with the other unfair acts alleged as with the allegations of patent infringement, except that with respect to the common-law trademark, only the manufacture, promotion and sale of the drill bit is part of the domestic industry.

The Scoggins affidavit shows the existence of a domestic industry within the meaning of Section 337,

(C) % of SMI's business is devoted to the production, promotion and sale of the apparatus in issue. [Scoggins affidavit, para. 4 and 27(ii).1 SMI is located in a modern 26,000 square-foot plant in Graham, North Carolina. Four people are employed on a full time basis and devote substantially all of their work time to the promotion and sale of the product in issue (Scoggins affidavit, para. 16).

Component raw materials utilized by complainant are obtained from domestic sources. These raw materials include custom-machined bit stocks, spring steel rods, and the components for fabricating the coupling devices. Manufacture of the drill component of the product in issue is contracted out to P&S Machine Company, Inc., a domestic corporation that uses modern and efficient equipment. (Scoggins affidavit para. 17).

Two licenses have been granted (under the terms of settlement of prior unrelated litigation). One licensee no longer sells the apparatus in issue. The other licensee (Wheeler) continues to operate under the license but has terminated payment of royalties because of the infringement of the patents by respondent EPC, in accordance with the terms of the license agreement (Scoggins affidavit, para. 49). Under the terms of the consent order with Canadian Flexi Drill that company also will become a non-exclusive licensee in the United States. The economic information submitted with the motion with regard to Wheeler's sales is insufficient to draw any conclusions with regard to the extent to which it might be part of the domestic industry. It is likely that Canadian Flexi Drill's activities will be principally in Canada

and not a substantial part'of the domestic industry, although it will pay royalties. (The fact that Wheeler has stopped Paying royalties is evidence of additional injury to the domestic industry.)

The domestic industry operating under the '188 and '549 patents was started by Diversified Manufacturing and Marketing Company, Inc. ("DMM"), which was acquired by and merged into SMI in 1979 (Scoggins affidavit para. 3). Prior to the acquisition, DMM's average annual advertising expenditures between 1977 and 1979 were about $ and gross sales were (C) - increasing at an annual average rate of about % (Scoggins affidavit, para. (C) 21). Following acquisition of DMM, SMI expended substantial amounts on advertising and promotion of the apparatus in issue (Scoggins affidavit, para. 22). Sales increased by % (adjusted annual rate) in the first eight months (C) following acquisition of DMM, % in fiscal year 1981 and % in fiscal year (C) 1982 (Scoggins affidavit, para. 22).

The market for flexible. drill apparatus is highly specialized and there is no indication in the 'affidavits submitted that it existed prior to the inventions of the '188 and '549 patents. Those inventions are said to have gained wide recognition as an advance in the art of installing electrical lines (Scoggins affidavit, para. 9). Although complainant is a relatively small company, it has the ability to expand the market and to meet the demand which it has generated. Complainant has rigorous quality control standards (Scoggins affidavit, para. 15 and 16). While SMI does not maintain a formal research and development department, it does review the performance and design

of its product (Scoggins affidavit, para. 28). It has spent large sums on *new* equipment since the acquisition in 1979, and it has computerized operations. It utilizes rigid quality control practices. Until introduction of the imported products in issue, SMI had been consistently profitable (Scoggins affidavit para. 26).

Based solely on the information in the affidavits, it is found that there is an efficiently operated industry in the United States.

I. INJURY

EPC has sold imported drills under the name "Snakebit" since about April of 1981 '(Scoggins affidavit, para. 32; Riggs affidavit).

EPC acquired Alarm Supply (ASC) in February of 1983 (Scoggins affidavit, para. 36). Since about September of 1983, (i.e. following the acquisition by EPC), ASC also has sold the imported "Snakebit" in the United States (Riggs affidavit; Scoggins affidavit, para. 38 and SMI Ex. 11 attached thereto).

There is no information showing that Ming Chang has sold the product in issue in the United States, but Ming Chang is soliciting orders for its products known as "Bell Hangers' Drills" (Eckerd affidavit; SMI Ex. 17 attached to Scoggins affidavit).

Although the exact number of infringing imported drills and the market share taken by such goods are not known, there is evidence of lost sales. In 1980, the year prior to respondent EPC's introduction of the "Snakebit," EPC had placed orders with complainant for the product in issue totalling (C) $. Since 1980, EPC has made no purchases of the apparatus in issue

(Scoggins affidavit, para. 30). Assuming no change in the level of sales by EPC, the switch by EPC from the SMI apparatus to the infringing imported apparatus represents annual lost sales of about $. Whatever the acLual (C) level of EPC's sales, as the patent owner, SMI was entitled to exclude EPC from using or selling infringing apparatus, and any sales of infringing apparatus by EPC represented sales lost to SMI or its licensees.

The effect of the "Snakebit" on the sale of complainant's products by distributors can be seen from the purchases by ASC before it was acquired by EPC. ASC's purchases from complainant consistently increased in each semi-annual period from 1979 through the first half of 1981, rising from an average monthly purchase of in the first half of 1979 to an average (C) monthly purchase of $ in the first half of 1981. Following the (C) introduction of the "Snakebit" in 1981, purchases by ASC from complainant declined sharply, dropping to an average monthly figure of $ in the first (C) half of 1982 (Scoggins affidavit, para. 37). Beginning in the second half of 1982 and continuing into the first half of 1983, average monthly purchases by ASC began to recover (Id).

ASC was acquired by EPC during the first half of 1983 and ASC officially included the "Snakebit" in its line in the middle of the second half of 1983 (SMI Ex. 11, attached to Scoggins affidavit). Average monthly purchases by ASC of the product in issue from SMI then declined by approximately % in (C) the second half of 1983 (Scogc′ins affidavit, para. 37).

In fiscal, years 1983 and 1984, SMI- has experienced 'a decline in numher of units sold, gross profiti, and net operating profit'(Scoggins affidavit para. 24, 26, 17).

No information has, been submitted to suggeit that the decline in sales by complainant can he Attributed -to a shrinking market or to other economic factors. Others selling the apparatus in issue have experienced' a marked increase in sales during aTeriod when 'complainant has experienced a decline. (Compare Wallach affidavit, para. 7, with Scoggins affidavit, para. 24.)

There is evidence that ASC sells the infringing imported products for lower prices than complainant's prices. In February and October, 1984, ASC sold the Model 173 drill (3/8" x 54") for 115.95 (Riggs affidavit, para. 5 and 6). SMI offers its 3/8" x 54" drill at 09.16 (Scoggins affidavit, para, 25). Earlier sales by respondent 1PC had been made at even lower prices (Riggs affidavit, para. 3), but comparative data as to SMI's prices at the same time have not been submitted with: the motion.

Information that would lead to a conclusion that the imported product enjoys a cost advantage has been submitted in a torm (unsworn answers to interrogatories) that cannot be' considered, here.

Other, entities are attempting.to enter the U.S. marketplaCe, and barriers to entry apparently are not great. Ming Chang isoffering'infringing imports for sale in the United States (Eckerd affidavit; Scoggins affidavit para. 45; SMI ex. 17) and other firms such as Signal Supply Corp. stand ready to enter the market. They already appear to be importing parts of the apparatus in

issue. (See Scoggins affidavit, para. 43, 44 and 45.) An investment of only $5000 is required to:produce the apparatus in issue. A machine shop having a drill press, drill grinder, and induction welder can produce this apparatus (Scoggins affidavit, para. 46). By focusing on the more popular drill sizes, a foreign manufacturer could capitalize on the efforts of complainant to develop a market for this apparatus.

Complainant has submitted sufficient information in affidavit form to permit a summary determination that the domestic industry has been injured substantially, and that the tendency of the unfair acts found is to injure substantially .the .domestic industry.

J.. CONCLUSION'

Complainant has offered facts in affidavit form that, if offered in sworn testimony at trial and not contested, would establish prima facie evidence of violation of Section 337 by tbe two respondents Emergency Products Corp. and Alarm Supply Co., Inc. in connection with the importation of the apparatus in issue. The facts stated -in the affidavits indicate that these respondents have infringed the common7law trademark of complainant, have infringed the '183 and '549 patents, and have engaged in false advertising and passing off of these imported products, thereby directly causing substantial injury to an efficiently operated domestic industry. These facts are not contradicted by opposing. affidavits, and are deemed established. It is found, therefore, that respondents Emergency Products Corp. and Alarm Supply Co., Inc. have violated Section 337.

The issue of whether Ming Chang Carpenter Auger Sit Co., Ltd. has violated Section 337 raises genuine issues of material fact and must go to trial, unless the complaint is withdrawn as to this respondent. The complaint could be withdrawn as to this respondent without prejudice since this respondent has not yet filed a response to the complaint. (See Rules 15(a) and 41(a) of the Federal Rules of Civil Procedure.)

To the extent indicated above, Motion No. 196-5 is granted. 1/

Janet D. Saxon
Administrative Law Judge

Issued: December 27, 1984

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if Pursuant to 19 C.F.R. i210.53(h), this initial determination shall become the determination of the Commission unless a party files a petition for review of the initial determination pursuant to $210.54, or the Commission pursuant to 5230.55 orders on its own a review of the initial determination or certain issues therein. For computation of time in which to file a petition for review, refer to 5i210.54, 201.14, and 201.16(d).

Oct. 12, 1971 3,611 549

METHOD FOR FOR.MTVHOMPFS AND INsTkL,:'I"a
STRUCT.:RAL
LINES IN YEYBEFS

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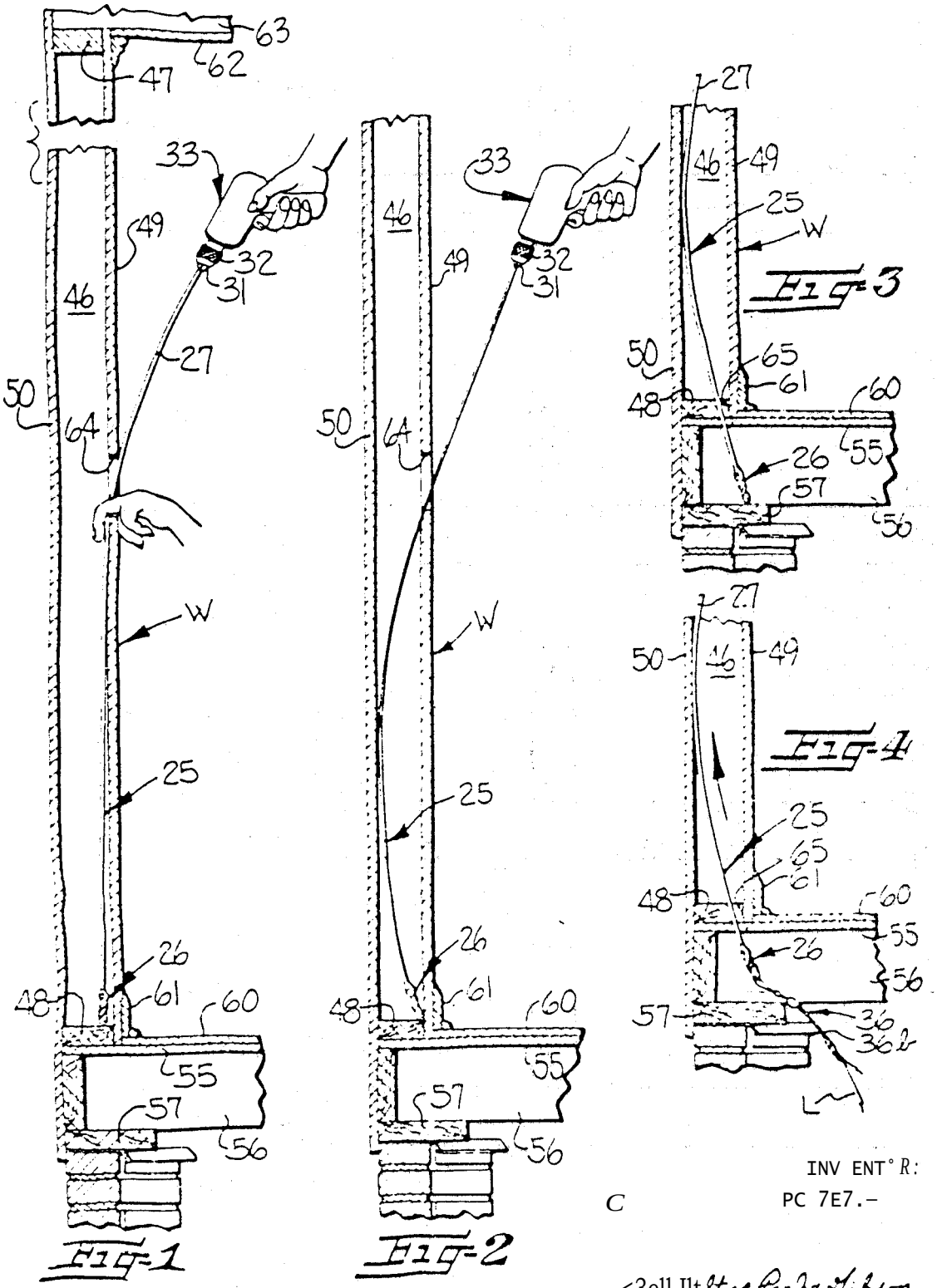

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<3ell, Ilt Hyer, Park & Gibson

ATTORNEYS

Oct. 12, 1971 G. F. POPE 3,611,549

METHOD FOR FORMING HOLES IN AND INSTALLING LINES IN STRUCTURAL MEMBERS

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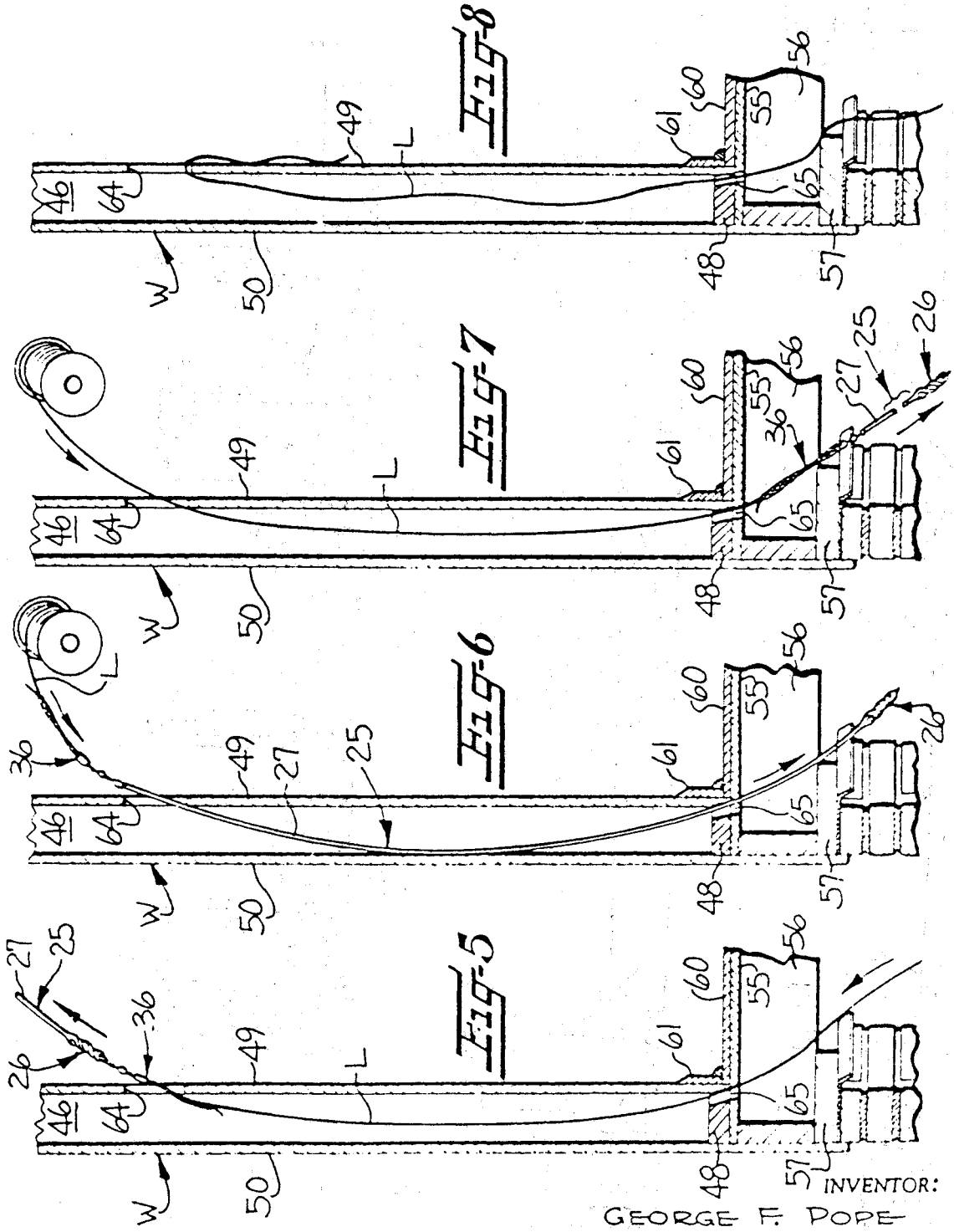

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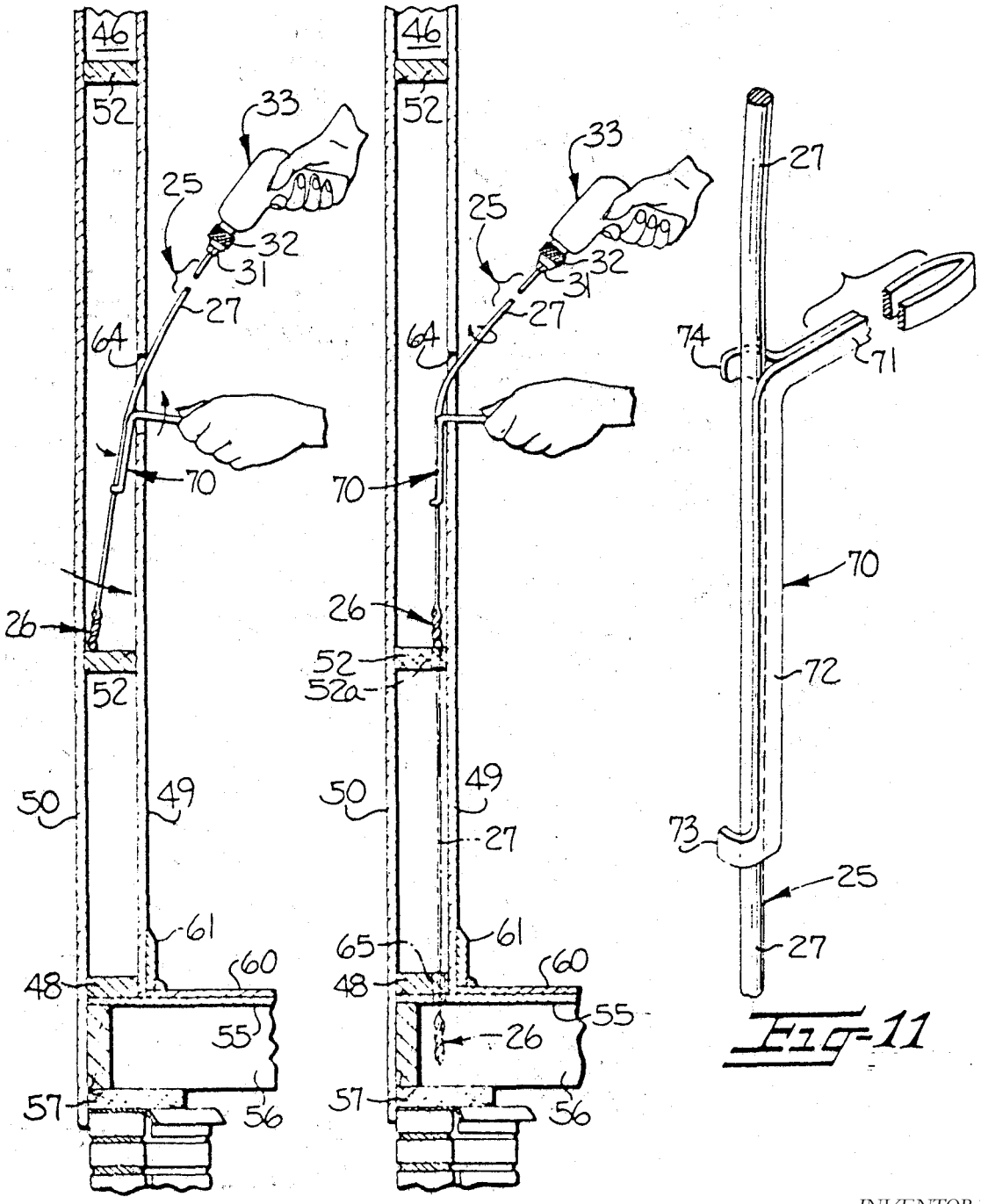

Fig-9 Fig-10 Fig-11

INVENTOR:
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nyfirActragethilm, Ri.hLie.,-,1,

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A-3

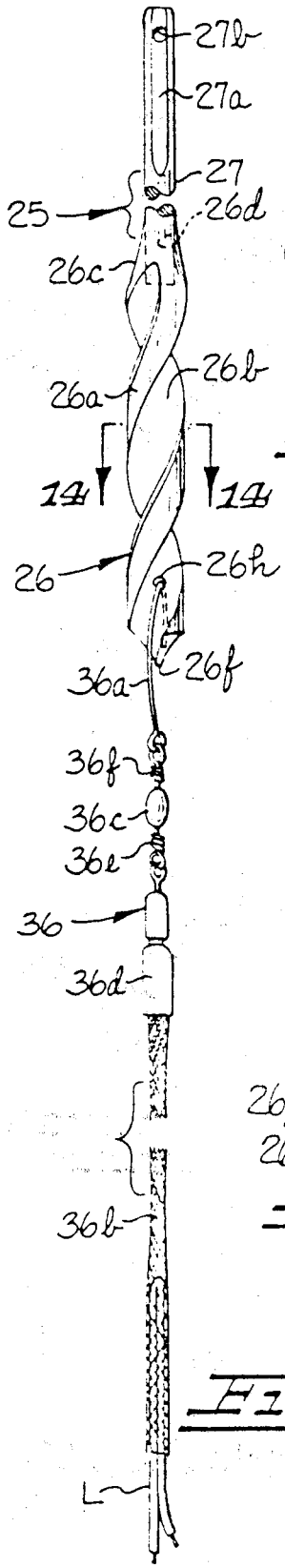

Fig-12

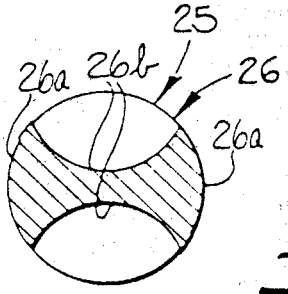

Fig-14

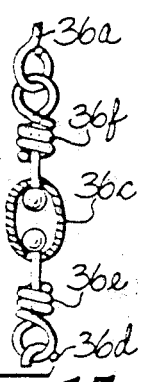

Fig-15

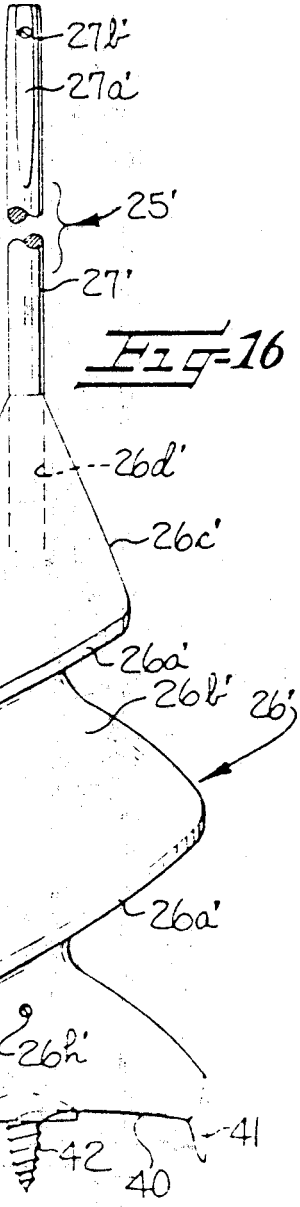

Fig-16

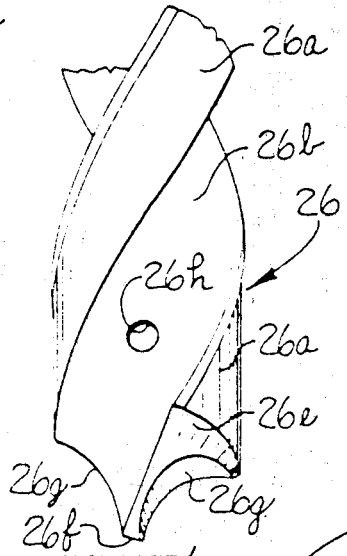

Fig-13

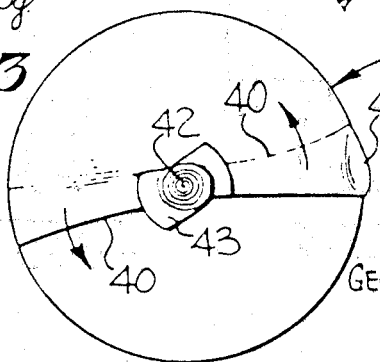

Fig-17

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Oct. 12, 1971 **G. F. POPE** 3,611,549

METHOD FOR FORMING HOLES IN AND INSTALLING LINES IN STRUCTURAL MEM3ERS

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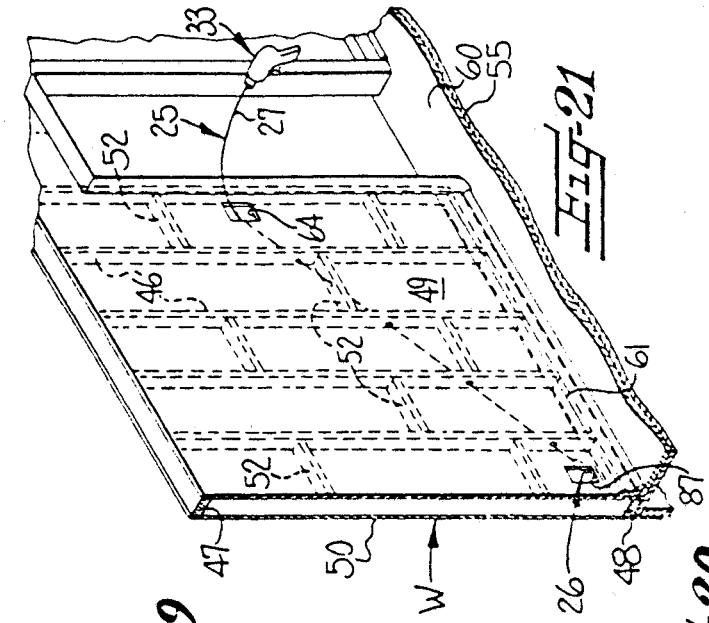

Fig-21

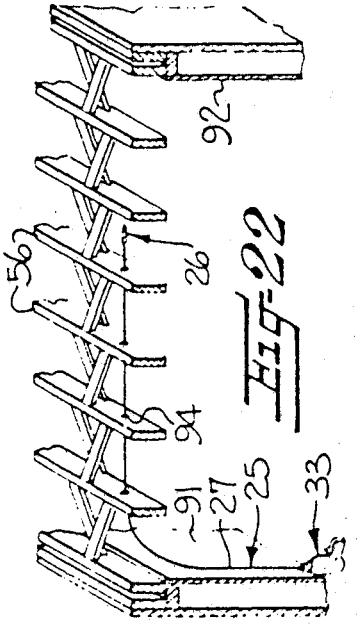

Fig-22

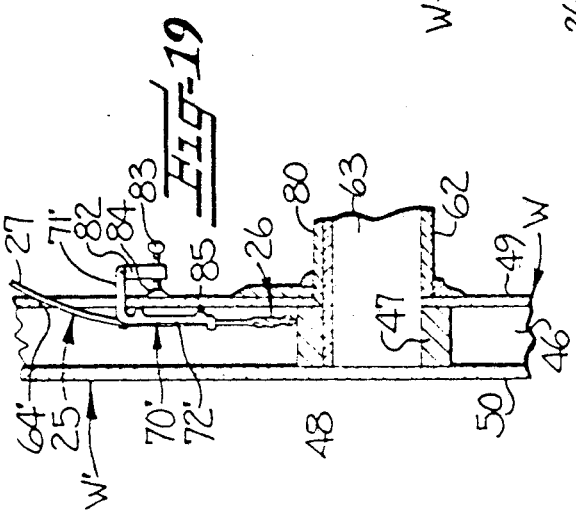

Fig-19

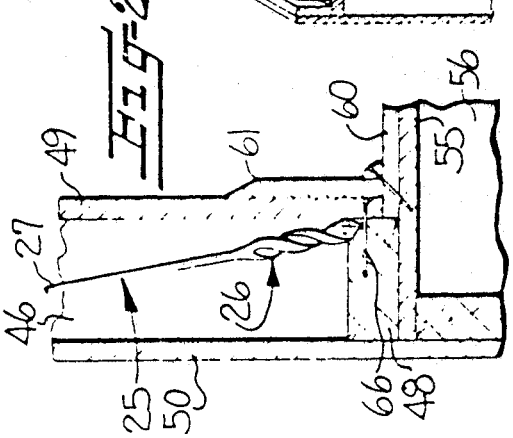

Fig-20

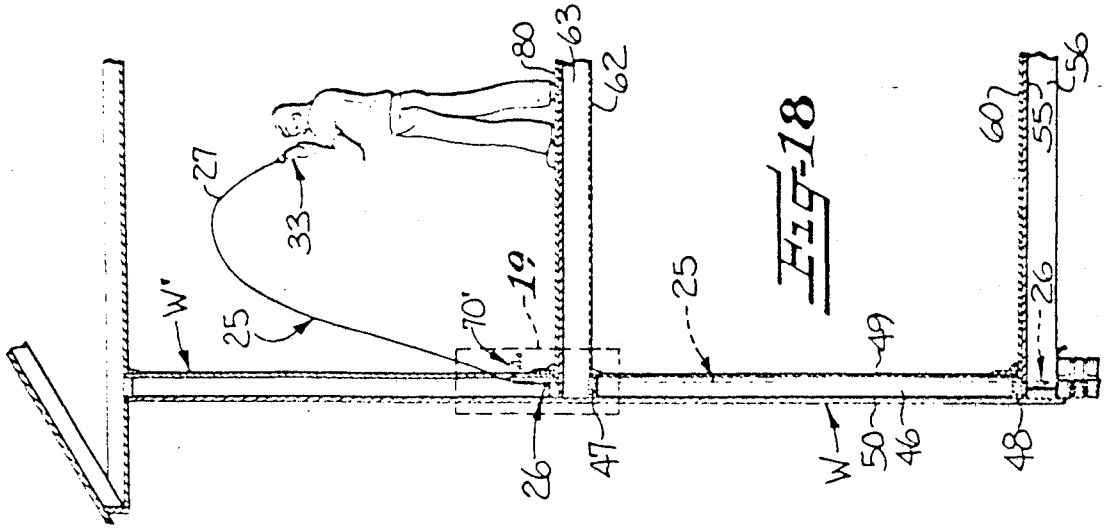

Fig-18

United States Patent Office 3,611,549
Patented Oct. 12, 1971

3,611,549

METHOD FOR FORMING HOLES E•1 AND INSTALLING LINES IN STRUCTLRAL MEMBERS

George F. Pope, Burlington, N.C., assignor to Diversified Manufacturing Sc Marketin g Inc., Burlington, N.C.

Filed July 1, 1969, Ser. No, 838,270
Int. Cl. B23p *19/04*
U.S. Cl. 29-433 10 Claims

ABSTRACT OF THE DISCLOSURE

Holes for electrical conductor lines and the like are formed through oftentimes inaccessible wooden obstructions, such as structural frame mernbers of a hollow wall, by utilizing a novel drill having an elongate spring-like shaft with a drill bit on its leading end, and wherein the shaft may be bowed to insert the same into the wall to direct the drill bit in the desired direction. The method further comprises connecting a pliable line (a pull line or conductor line) to one end of the drill after it has passed through the wall, and then removing the drill while pulling the line therewith to position a length of the pliable line extending through the wall.

In the erection of many buildings the exterior walls and floors thereof include a framework of wooden structural members; e.g., studs, sills, shoes, plates, cross braces, bridging members, floor joists, etc., and even in many buildings whose exterior walls and floors may be of masonry construction, most inside walls or partitions include a framework of wooden structural members. It is usual practice to install electrical conduits, electrical conductors, piping for plumbing, vacuum conduits for built-in vacuum cleaning systems, and the like, in walls, floors, ceilings, and other structures before they are closed. However, it is frequently difficult for a workman to drill holes throueh structural members of such structures, even before the structures are closed, because the usual standard distance between adjacent studs is about 14 3/s inches so that they are generally positioned so close to each other that a conventional drill bit and its motor, brace or other driving device are necessarily too long to be positioned between adjacent structural members at right angles thereto. Thus, it has been necessary heretofore to, at times, drill such holes at an undesirable angle when using conventional, readily available drilling equipment. In some instances, a hole could be drilled at the desired right angle through a structural member by utilizing a ratchet drill assembly or a relatively small hand-operated brace and drill bit. However, in instances in which a common cable or conduit was to be positioned extending throueh a series of such structural members, the latter procedure would have to be followed in drilling a hole throueh each of the structural members in the series, thus being a time consuming and costly procedure.

Additionally, it frequently happens that pipes, conduits and/or electrical conductors must be installed in oftentimes inaccessible areas, such as hollow wall, floor and ceiling structures, after they have been closed, especially in old building constructions. For example, in order to install a pliable conductor line in a closed hollow wall heretofore, the electrician would drill a hole into the upper and/or lower end of the wall, and communicating with the space between adjacent studs, by drilling from an accessible area in the attic or basement of a building. A "snake" pull line then would be inserted through the drilled hole and moved about by the electrician until it registered with a previously formed access opening in one face of the wall, to be grasped and pulled therethrough by the electrician's assistant. Thereafter, a conductor line was connected to the pull line and pulled through the drilled hole, the wall and the access opening by pulling the pull line outwardly through the access opening. It can be appreciated that such a procedure is expensive and time consuming.

The problem becomes even more critical in those instances in which there are one or more bridging members or other obstructions within the hollow wall between adjacent studs, or in instances in which the upper and lower ends of the wall are inaccessible from above or beneath the same. In many instances it has been necessary to remove or break away substantial portions of the face of a wall in order to gain such access to the interior of the wall as is required to install an electrical conduit line therein.

It is an object of this invention to provide an improved method and apparatus which greatly simplifies the drilling of holes in oftentimes inaccessible assembled structural members and reduces the above-mentioned and other problems encountered heretofore.

It is another object to provide an improved method and apparatus for drilling holes in and installing pliable lines; e.g., pull lines and/or conductor lines, in structural members of hollow wall, floor and ceiling structures.

It is a more specific object of this invention to provide an improved drill for facilitating drilling of holes it structural members oftentimes located in inaccessible areas, comprising a relatively short drill *bit,* and a spring-like, readily flexible shaft of much greater length than, and of smaller cross-section than, the drill bit and having one end secured to the drill bit, and wherein the shaft is made from a material, such as spring steel, characterized by having such flexural rigidity as to spring back to its original condition upon being flexed or bowed therefrom.

Still another object is to provide a method of installing a pliable line, such as a pliable pull line or a pliable conductor line, from an area outside of a hollow wall in and through the wall and at least one wooden structural obstruction therein, such as a stud, a bridging member, a shoe, a plate, a floor joist or the like; which method comprises moving a drill having a spring-like shaft with a drill bit secured to the leading end thereof through an access opening in one face of the wall while bowing the shaft to direct the drill bit along a path corresponding to the desired run of the pliable line, rotating the drill while applying a longitudinal force thereto to cause the drill bit to drill a hole through the structural obstruction in its path, ceasing rotation of the drill after the drill bit has reached an accessible area, connecting a pliable line to one end of the drill, and passing the drill through the drilled hole in a direction away from the pliabie line to an area outside of the confines of the hollow wall to remove the drill from the wall while pulling the pliable line therewith to position a length of the pliable line extendin-g through the hollow wall.

Some of the objects of the invention having been stated other objects will appear as the description proceeds when taken in connection *with* the accompanying drawings in which—

FIGS. 1-5 are fragmentary vertical sectional views through the hollow wall of a building, illustrating successive stages, utilizing the improved drill, in practice of the method of this invention;

FIGS. 6, 7 and 8 are views similar to FIGS. *1-5* illustrating a variation of those successive stages of the method illustrated in FIGS. 4 and 5;

FIGS. 9 and 10 are views similar to FIGS. 1 and 2 illustrating the use of a special flexing tool to aid in bowing and guiding the spring-like shaft of the drill within the hollow wall;

FIG. 11 is an enlarged perspective view of the special flexing tool shown in FIGS. 9 and 10 guidingly enAaTing *a* portion of the drill shaft;

FrO. 12 is art enlarged detail of one form of the drill associated coupling means for detachably connecting pliable line thereto, with parts broken away;

FIG. 13 is an enlarged perspective vie.w of the leading *end* portion of the drill bit of FIG. 12;

FIG. 14 is an enlarged transverse sectional view through the drill bit taken substantially along line 14-14 in FIG. 12;

FIG: *15 is a* fragmentary detail, partially in section, illustrating swivel connecting means between an attaching member connected to the leading end portion of the drill bit and a braided tubular gripper member shown in the lower portion of FIG. 12;

FIG. 16 is an elevation of a modified form of drill bit secured to the spring-like shaft for drilling relatively large holes through wooden structural members;

FIG. 17 is an end view of the drill bit shown in FIG. 16;

FIG. 18 is a vertical sectional view through a portion of a building particularly illustrating another variation in the method of the present invention utilizing a drill w hose spring-like shaft is of such length as to permit drilling from one story to another story of a building;

FIG. 19 is an enlarged fragmentary vertical sectional view of the area identified by the numeral 19 in FIG. 18;

FIG. 20 is an enlarged fragmentary view similar to the lower portion of FIG. 2 particularly showing how the drill bit may be used for cutting through nails or other 'metallic objects embedded in a corresponding wooden structural member being drilled thereby;

FIG. 21 is a fragmentary perspective view illustrating the use of the novel drill for drilling holes diagonally through a plurality of spaced apart structural frame members; and

FIG. 22 is a fragmentary perspective view illustrating the use of the novel drill for drilling holes through *a* series of floor joists even though the operator may he hindered by adjacent walls or other obstructions of the building.

Referring more specifically to the drawings, the essential apparatus for carrying out the method of this invention resides in a novel drill shown in the practice of variations of the method of the invention in FIGS. 1-7, 9-11 and 18-22. Details of one form of the drill appear in FIGS. 12-15, and details of a modified form of the drill are shown in FIGS. 16 and 17. In order that the various stages or steps of the method may be clearly understood, the detailed description will first be directed to the drill per se.

The first form of the drill of this invention is broadly designated at 25 and comprises a relatively short, rigid, hardened steel drill bit 26 of helical form, generally known as a "twist drill." One end of a spring-like, readily flexible, shaft 27 of much greater length than, and of smaller cross-section or diameter than, drill bit 26 is fixedly secured to the trailing end of drill bit 26; i.e., the end of drill bit 26 remote from its pointed or cutting end.

An essential characteristic of drill shaft 27 is that it must have such flexural rigidity as to spring back to its orieinal condition upon being bowed or flexed therefrom. Therefore, it is preferred that drill shaft 27 is section from spring steel of substantially uniform cross-section or diameter throughout at least a major porlion of its length. It is also preferred that drill shaft 27 is normally straight and of circular cross-section throughout substantially its entire length, with the exception of a relatively short portion 27a of the end thereof remote from drill bit 26. The latter short porLion 27a is preferably of rectangular or other polygonal cross-section, as shown in FIG. 12, to ensure that drill shaft 27 may be firmly gripped in the jaws 31 of the chuck 32 of a suitable manually manipulated drill rotating or driving device 33 (FIGS. 1 and 2). It is preferred that drill driving device 33 is in the form of a reversible electric motor, especially for carrying out the

steps of the method illustrated in FIGS. 4 and 5 to be later described, and that the housing of the electric motor preferably includes a pistol grip portion 34 to be gripped by an operator for manipulatnig and applying longitudinal force to drill 25, and for otherwise controlling operation of drill 25.,

Any suitable means may be provided for fixedly securing shaft 27 to drill bit 26. Preferably, *as* shown in FIG. 12, the trailing end portion of drill bit 26 is provided with an axially positioned, longitudinally extending bore or cavity 26d therein for tightly =tingly receiving the corresponding end of drill shaft 27 therein. In practice, the wall of bore 26d, and/or the corresponding end portion of drill shaft 27 was coated with silver solder before inserting the end of drill shaft 27 in bore 26d so as to form a rigid connection between drill bit 26 and drill shaft 27.

Drill bit 26 is preferably of the double helically fluted type whose helical ridges or lands 26a define helical grooves 26b therebetween. It will be observed in the upper portion of FIG. 12 that drill bit 26 is self-cleaning, in that it is formed with a tapered or frusta-conical portion which merges with the corresponding end of drill shaft 27. The grooves 26b of drill bit 26 extend sufficiently into the plane of tapered portion 26c so that the trailing ends of the helical grooves 26b are open to facilitate the discharge of wooden particles; i.e., chips, sawdust and other debris, out of the trailing ends of helical grooves 26b during the drilling of holes in wooden structure members.

In order that drill bit 26 may be readily withdrawn through *a* hole previously drilled thereby in a structural member, as is the case with respect to the first embodiment of the method of this invention to be later described, it is preferred that both edges of the lands 26a of drill bit 26 *are* sharp so that the drill bit will. not only cut the member being drilled during forward rotation thereof in the initial drilling of *a* hole therethrough, but will also cut the member during reverse rotation thereof when drill bit 26 is being withdrawn through a previously drilled hole.

The leading end of drill bit 26 (FIG. 13) has a tapered tip 26e thereon terminating in a small chisel-edged point 26/, with the tapered tip 26e being recessed or relieved, as at 26g, to elongate the point 26/. The elongate point 26f aids in startine the drill bit 26 into a wooden structural member during forward rotation of the drill bit without the necessity of an operator firmly holding the drill 25 at a point closely adjacent the drill bit 26 in order to steady the sac e and apply the required forward thrust thereto. Also, the recessed portions 26g of the tapered tip 26e define cutting edges which aid in the drilling operation, especially in instances in which nails or other metallic objects_may be encountered as shown in FIG. 20.

The characteristics of the leading end of drill bit 26, as described, are desirable in drill bits of relatively small diameter, say, in the range of about 3/4 to 1 inch diameter. In such ranee of drill bit diameters, the length of drill bit 26, from the trailing end of its frusto-conical portion 26c, to the chisel-edged point 26f thereof, should be in the range of about 11/2 to 4 inches and is preferably about 21/2 inches. This relatively short length of drill bit 26 has been found to permit the angle of the drill bit 26, relative to the wooden member being drilled, to be varied somewhat after the drill bit has initially entered the wooden member, as is sometimes desired. It has been found desirable that the diameter 0r equivalent cross-sectional area of at least the major portion of drill shaft 27 should be about inch for use with drill bits whose diameters are within the range of about 3/4 to 1/2 inch diameter, and should be about 'ii inch for use with drill bits in the range of about ?ie to 1 inch diameter or larger.

To facilitate detachably connecting a pliable line

such as an electrical conductor line, or a pull line, to either end of drill 25, the distal end portions of drill 25 have respective relatively small apertures 26h, 276 therethrough which may serve,. themselves, as ,coupling means in the event of a pliable' line being looped therethrough and having its free end tied or otherwise secured to the body of the pliable line. However, the apertures 26h, 27b are, necessarily quite small relative to drill bit 26 and shaft 27, respectively, so that they will not weaken the drill ;bit and the shaft. As is the case with respect to shaft 27, the cross-sectional area of shaft 27 is necessarily quite small and dictates that aperture 27b therethrough must also be quite small. Therefore, a separate detachable coupling means 36 is provided and is so constructed as to detachably connect relatively large diameter pliable lines L, such as the doubled end portion of an electrical conductor (FIG. 12), to either end of drill 25. Coupling means 36 also is constructed to permit -rotary movement of drill 25 without twisting pliable line L connected thereto, as is desirable in performing the steps of the method illustrated in FIGS. 4 and 5.

Coupling means 36 may comprise a strand-like attaching member or wire hook 36a, an expansible and collapsible braided tubular member or gripper 366, and an interconnecting swivel joint 36c therebemeen. One end of gripper 366 is open for grippingly receiving therein one end portion of pliable line L. The other end of gripper 366 is suitably secured to a fitting 315d having a wire connector 36e attached thereto whose headed or beaded end is positioned within the shell-like housing of swivel joint 36c, as shown in FIG. 15. The other end of the housing of swivel joint, 36c has the headed or beaded end of another wire connector 36f positioned. therein. The wire connector *361* is, suitably attached to the. hook 36a. Hook 36a may be detachably connected to either end of drill 25 by insertion thereof through the respective apertures 26h or 276. As shown in FIG. 12, hook .36a is positioned in aperture 26h of drill bit 26.

It is apparent that pliable line L may be detachably connected to tubular gripper 36b by inserting the line within the free end of tubular gripper 36b and then attenuating or stretching the tubular gripper to collapse and cause the same to tightly engage pliable line L. It is also apparent that the- operator may cause ,drill 25 to rotate in either direction,, when pliable line L is connected thereto by means of coupling means 36, without twisting or rotating pliable line L, since the swivel joint 36c permits the drill and hook 36a to rotate without rotating the wire connector 36e, the,fitting 36d and the braidedgripper 366. When pliable line L is to be disconnected from coupling means 36, it is apparent that the operator merely condenses braided gripper 36d in a longitudinal direction to increase the diameter thereof and release the pliable line L therefrom.

Referring to FIGS. 16 and 17, there is shown therein a second form of drill 25 which may be employed for carrying out the method of the instant invention in cases in -which relatively laree holes are to be formed in the structural members of the building. It is contemplated that the form of drill bit shown in FIGS. 16 and 17 would be desirable in instances in which the diameter of the holes to be drilled therewith are in the ranee of about 11/2 inches to 3 inches, for example. Such relatively large holes may be required to accommodate water pipes, electrical conductor line conduits, vacuum system conduits, or the like. Since the drill 25' shown in FIGS. 16 and 17 is quite similar to that shown in FIGS. 12-15, with the exception of the form of leading or cutting end thereof, those diements of drill 25' in FIGS. 16 and 17 similar to those shown in FIGS. 12-15 will bear the same reference characters, with the prime notation added, to avoid repetitive description.

Drill 25' differs from drill 25 primarily in that the lands 26a' at the leading end of drill bit 26' terminate at a pair of radially extending, diametrically opposed, end-cutting edges 40 which extend at substantially right angles to the axis of drill bit 26', as opposed to being tapered in the manner of the point of drill bit 26. Also, the outer end portion of at least one of the cutting edges 40 is provided with a forwardly projecting fly-cutter blade 41 thereon. At the juncture of cutting edges 40, bit 26' is provided with a relatively small, tapered and pointed pilot screw 42 backed up by a scroll cutter 43 of somewhat larger diameter than pilot screw 42 but of substantially lesser diameter than the diameter of the body of drill bit 26'. Pilot screw 42 projects forwardly from cutting edges 40 a greater distance than fly-cutter blade 41 and cooperates with scroll cutter 43 to engage and aid in pulling drill bit 25' into the wooden structural member being drilled as the operator applies a, longitudinal forward force to drill 25' during rotation thereof.

In all steps and variations of the method of the instant invention; the description will be directed to the use of the first form of drill 25, although where relatively large holes *of* about 11/2 to 3 inches diameter are to be drilled, the second form of drill 25' may be used in place of drill 25. Also.. the exemplary building construction will bear the same reference characters throuzhout the disclosure, w here applicable, although several variations of the method will be described in association therewith.

As shown in FIGS. 1-10 and 18-21, the building construction comprises a substantially vertical disposed hollow wall W, which may be of conventional construction and includes a framework of wooden structural members or internal obstructions such as laterally spaced substantially upright studs 46, an upper horizontal frame member or plate 47, and a lower horizontal frame member or shoe member 48, to which opposing inner and outer or first and second facings 49, 50 are suitabl y secured. As shown in FIGS. 9 and 10 only, additional cross braces or bridging members 52 are provided between adjacent studs 46:

Hollow wall W is supported upon a sub-floor 55 carried by basement floor joists 56 mounted on a sill 57, as is usual. A finished floor 60 is secured upon sub-floor 55, and a, baseboard 61 is secured to inner wall facing 49 at its juncture with finished floor 60. A ceiling panel 62 is secured to the lower surfaces of ceiling joists 63 supported upon and suitably, secured to plate 47 of hollow wall W. Ceiling joists 63' Serve as upper story floor joists in FIGS. 18 and 19. Inner wall facing 49 has a suitable access opening 64 therethrough spaced a substantial distance above finished floor 60 and shoe member 48. Access opening 64 may be provided for reception of an electrical outlet box or the like, not shown.

According to the successive steps or stages illustrated in FIGS., l-5, either before or after the trailing end of spring-like shaft 27 of drill 25 is secured in chuck 32 of drill driv;ng.device 33, drill 25 is inserted; drill 26 first, from an area outside of the confines of hollow wall W through access opening 64. The spring-like shaft 27 is manually flexed or bowed outwardly away from facing 47 above acess opening 64 as'the operator also bows shaft 27 within wall IN to direct the same along a path corresponding to the desired run of a pliable line L; in this instance, a pliable electrical conductor line (FIG. 4), until the leading end of drill bit 26 strikes an obstruction such as shoe member 48.

It should be noted, as observed in FIG. 1, that the operator bows the portion of sprng-like shaft 27 within wall W and adjacent opening 64 in such a manner that the lower portion of shaft 27 and drill bit 26 extend generally parallel to wall facing 49, with drill bit 26 positicned closely adjacent and inwardly of wall facing 49. Since, in the particular building construction shown, shoe member 48 is spaced above still 57, it is advantageous to form a drilled hole-or passage through shoe member 48 at somewhat of an angle so that the drill 25 A.aSkequently will be readily accessible to an operator in the

area of floor joists *56.* Accordingly, after drill bit 26 has been positioned in the manner described with respect to FIG. 1, the operator releases the medial portion of spring-like shaft 27, permitting the same to bow outwardly away from wall facing 49 and against the inner surface of the opposite wall facing 50. In so doing, this causes drill bit 26 to occupy the angular attitude shown in FIG. 2.

The operator then starts drill driving device 33 to rotate shaft 27 and drill bit 26 while manually applying a longitudinal force thereto, which force is transmitted to some extent through the bowed portion by the inner surface of the outer facing 50 engaging the apex of the inner bowed portion of shaft 27, to cause drill bit 26 to drill a bole 65 (FIG. 3) at an acute angle relative to facing 49 through the corresponding structural wall obstruction embodied in shoe member 48. Since the first form of drill bit 26 is similar to conventional forms of drills used for drilling metal, in the event that there are any nails or other metallic obstructions, such as the nail 66 of FIG. 20, in the path of drill bit 26 in its course through shoe member 48, drill bit 26 will readily cut away the nail or other metallic obstruction; i.e., such metallic obstruction will not interfere materially with the drilling operation.

Since shaft 27 is of substantially smaller diameter than the effective diameter of drill bit 26, it is apparent that the operator will feel the drill 25 yield upon passage of drill bit 26 through wooden shoe member 48 and then may stop drill driving device 33 to cease rotation of drill 25 (FIG. 3). Thereupon, operator, or his assistant, connects pliable electrical conductor line L to the leading end portion of drill bit 26 by means of the coupling means 36 as described heretofore with respect to FIG. 12 (see FIG. 4).

Drill 23 then is removed from wall W by retracting or passing the same through drilled hole 65 in a direction away from conductor line L to an area outside the confines of hollow wall W while pulling the pliable conductor line therewith to position a length therof extending through hollow wall W. As shown in FIG. 5, drill bit 26, which formerly occupied a position beneath wooden shoe member 48 in FIG. 4, has now been withdrawn through hole 65 and through hollow wall W and thence through access opening 64. It can be appreciated that, when coupling means 36 is fully withdrawn out of access opening 64, line L may be disconnected from drill bit 26, and a length of conductor line L then occupies a position within the wall with opposed end portions of line L extending outwardly from access opening 64 on the one band, and from the drilled hole 65 on the other hand, so as to be readily accessible to the electrician at both ends thereof.

Since the operator may be required to manipulate the drill 25 from a point a considerable distance away from shoe member 48 and floor *55, it* is advantageous to reverse drill driving device 33 to drive drill 25 in the opposite direction from that in which it was rotated during drilling of the hole 65, at least during retraction of drill bit 26 through the previous drilled hole, to facilitate removing the drill from the wall during the pulling of the pliable conductor line L therewith. During such reverse rotation of drill 25, it is to be noted that, since swivel joint 36c is interposed in the connection between pliable *con* ductor line L and drill bit 26, drill 25 may be rotated without twisting the pliable conductor line during the removal of the drill from the wall and the pulling of the pliable line therewith. As heretofore stated, it is preferred that both edges of the lands 26a of drill bit 26 (FIGS. 12 and 13) are sharp so that the drill bit may cut additional material away from shoe member 48 during retraction of the drill 25, in the event Of the drill becoming canted or biased relative to the previously drilled hole 65 during its passage therethrough.

The tapered portion 26c of drill bit 26 will also earn drill bit 26 into the previously drilled hole 65 as retraction of drill bit 26 through hole 65 is initiated. Cessation of rotation of drill 25 may be effected by the operator at any time following retraction of the entire drill bit 26 through shoe member 48.

It is apparent that, drill 25 may be directed upwardly through access opening 64 and hollow wall W if a hole is to be drilled through upper horizontal frame member or plate 47.

In instances in which the pliable line is to be in the form of a pull line positioned in hollow wall W, as will be more fully described hereinafter, since some forms of pull lines may be rotated without twisting the same, or the twisting of the same may not be objectionable, the separate connecting means 36 could then be omitted and the pliable line could be inserted through aperture 26/i 13 (FIGS. 12 and 13) to interconnect drill bit 26 and pliable line L, if desired.

FIGS. 6-8 are alternative to those of FIGS. 3-5 in that, instead of drill 25 being withdrawn from wall W through the same access opening 64 through which drill 25 was originally inserted and, instead of connecting the pliable line L to drill bit 26, shaft 27 is disconnected from driving device 33 and coupling means 36 is connected to the end portion of shaft 27 remote from drill bit 26 (FIG. 6). In this instance, coupling means 36 is connected to 23 spring-like shaft 27 by inserting the hook 36a of coupling means 36 through aperture 27b (FIG. 12) and by connecting a pliable line L to coupling means 36 in the manner as described with respect to the lower portion of FIG. 12. Here again, coupling means 36 may be omitted and pliable line I. may be connected directly to shaft 27 by inserting the same through aperture 27b, if desired.

Referring to FIG. 7, it will be observed that drill 25 and pliable line L have been pulled through access opening 24, through hollow wall W and through drilled hole 65 33 in succession, so that end portions of pliable line L are both positioned in respective accessible areas, thus avoiding the need for passing drill bit 26 back through the previously drilled hole 65. The lower portion of pliable line L of FIG. 7 then is released from coupling means 36 to leave a substantial portion of line L projecting outwardly through access opening 64 and drilled hole 65. Pliable line L may be in the form of either a conductor line or a pull line in the steps illustrated in FIGS. 6--8.

Assuming, for the moment, that pilable line L is a pull *line, it* is apparent by referring to FIG. 8 that the line can be positioned in hollow wall W some considerable time, if desired, prior to an electrician inserting electrical conductors in the hollow wall, since the representative pull line L of FIG. 8 may simply have one end of a conductor line connected to either end thereof, whereupon the conductor line may be readily pulled through the wall W by the electrician grasping the then free end of the pull line remote from the electrical conductor line connected thereto and pulling the same through the hollow wall W and the opening 64 and drilled hole 65 previously formed therein.

Referring to FIGS. 9-11, it will be observed that the lower cross brace or bridging member 52 is spaced a substantial distance below access opening 64 and a substantial distance above shoe member 48. In this instance, it is apparent that it would be desirable that drilled holes be formed through both the lower bridging member 52 and the shoe member 43 with the holes thereof in substantially vertical alignment with each other. Accordingly, in the practice of the method steps shown in FIGS. 9 and 10, the portion of spring-like drill shaft 27 and drill bit 26 within hollow wall W are held in a substantially vertical position substantially parallel with the inner surface of wall facing 39 throughout the drilling operation, thus requiring substantial flexing or bowing of the medial portion of shaft 27 during rotation thereof. Thus, it may be desirable to use a special flexing or bowing tool, broadly designated at 70, to aid the operator in bowing drill shaft 27. Essentially, flexing tool 70 guidingly engages drill shaft 27 along its length at spaced points within wall W to ultimately inn-

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part a greater bow to the overall shaft while effecting a straightening of substantially the entire length of that portion of shaft 27 within the wall, and while positioning the same to extend substantially parallel with the wall faces.

Flexing tool 70 is of geenrally L-shaped configuration including a handle 71 and a body 72 in substantially right angular relation to each other., The lower or free end of body 72 has a substantially U-shaped foot guide member 73 integral therewith. Handle 71 may be formed by doubling the metallic material upon itself and bending the same into a substantially U-shaped form to form *a* substantially U-shaped head guide member 74 thereon Spaced a substantial distance from guide member 73. The arcuate or concave surfaces of guide members 73, 74 face in substantially opposite directions so that, by positioning the same against respective opposite sides of shaft 27, with body 72 of flexing tool 70 positioned within wall W •as shown in FIGS. 9 and 10, the operator may readily flex and bow shaft 27 to maintain the portion thereof within the building wall W in the desired position to drill a hole *52a* through bridging member 52 and thereafter to drill the hole 65 through shoe member 48 with both of the holes substantially in axial alignment with each other. After drilling holes 52a, 65 through the wooden structural members 52, 48 as shown in phantom lines in FIG. 10, subsequent steps involved in the insertion of a pliable line in hollow wall W may be effected in the manner described with respect to FIGS. 4 and 5 or in the manner described with respect to FIGS. 6 and *7.*

FIGS. 18 and 19 illustrate how the drill of the present invention may be employed for drilling holes in successive widely spaced wooden structural members such as may be associated with more than one floor of a building. The joists 63 in FIG. 18 serve as upper story floor joists supporting a floor 80 thereupon. The upper story also has a hollow wall W' thereon which may be constructed generally in the manner of hollow wall W and therefore will not be described in detail. The remaining portions of the building construction below the floor 80 bear the same reference characters as appear in FIGS. 1-10. The drill 25 as described with respect to FIGS. 1-10 may be of a medium length of about four to five feet, since electrical outlets such as might be positioned in access opening 64 are usually positioned in the range of about 36 inches to 43 inches above the finished floor 60. There are instances in which the length of spring-like shaft 27 need not be more than about 24 inches, such as when the drill is being used for drilling holes in wooden structural members positioned quite close to a wall opening. In FIG. 18, however, spring-like shaft 27 is of considerable length; e.g., about ten feet to twelve feet long, in order that the operator may drill holes through internal wall obstructions or any frame members in its path all the way from above the upper floor 80 through the shoe member 48 adjacent floor 60 of the first story of the building. In this instance, it will be observed in. FIG. 18 that the operator stands a substantial distance away from the inner facing of the hollow wall W during the drilling of holes in those structural members closely adjacent the access opening 64' through the inner facing 49' of the upper story hollow wall W'. To aid the operator in bowing shaft 27 in FIGS. 18 and 19 so that the portion thereof within hollow wall W' may extend substantially parallel with and adjacent wall facing 49', a tool 70' similar to flexing tool 70 of FIG. 11 may be employed.

The flexing tool 70' of FIGS. 18 and 19 includes a handle 71' and a body 72', both of which are constructed in a manner quite similar to handle 71 and body 72 of tool 70 in FIG. 11. However, the handle 71' of tool 70' (FIG. 19) is provided with a rigid depending arm 82 threadedly penetrated by a clamping screw 83 whose clamping end has a flange 84 thereon for clampingly securing flexing tool 70' to wall facing 49' with handle 71' extending through access opening 64'. The body 72' of flexing tool 70' in FIG. 19 may be provided with a pair of spacer projections 35 thereon for engaging the inner surface of wall facing 49' so that spring-like shaft 27 extending through the two U-shaped guide members of flexing tool 70' will be maintained a predetermined distance from the inner wall facing 49' during the drilling operation.

It is apparent that the various structural members shown adjacent second-floor joists or ceiling joists 63 in FIGS. 18 and 19 will be drilled successively by drill bit 26 as the operator applies a forward force to the drill through its bowed portion outside the wail W'. Thereafter, the operator may slowly walk toward the upper story wall W' while drill bit. 26 passes through the lower story wall W in FIG. 18 to ultimately drill holes through any other wooden structural members in its path, such as shoe member 48 shown in the lower left-hand portion of FIG. 18. Following the drilling of holes through the wooden structural members adjacent, the upper floor joists 63 and the lower floor joists 56, the remaining steps of the method may be carried out as described with respect to FIGS. 4 and .5 or 6, 7 and 8. Flexing tool 70' may be removed from wall \V' following the drilling operation whenever convenient to the operator.

FIG. 21 is .provided to illustrate the utility of the improved drill 25 of the instant invention for drilling successive holes through a series of spaced-apart wooden structural members in a common plane, either before or after the facings 49. 50 are installed, and wherein the successive holes are substantially aligned with each other and may collectively extend along a line generally diagonally of the corresponding hollow wall W. It will be noted that wall facing 49 in FIG. 21 has the access opening 64 thereof located a substantial distance above finished floor 60. Additionally, wall facing 49 has another access opening 87 therethrough closely adjacent the floor 60 or baseboard 61 and spaced laterally from access opening 64 a substantial distance.

Heretofore, the usual manner of forming a row of holes through the various studs 46 interposed between the two access openings 64, 87, would be to drill the holes substantially horizontally through the various studs 46 and to drill a hole or holes. vertically through cross braces or bridging members 52 before installing at least one of the facings 49, 50, and so that, ultimately, an electrical conductor inserted through such holes would have portions thereof in right angular relationship to each other. By drilling the holes according to the instant method, however, they may readily extend at an angle to, in effect collectively define the hypotenuse of a triangle, thus materially reducing the length of line required to extend between the two access openings 64, 87.

As shown in FIG. 21, as-the operator initially inserts drill bit 26 through access opening 64 and bows the leading end of shaft 27 into the common plane of the series of spaced apart wooden structural members or studs 46, the operator positions the other end of shaft 27, to which drill driving device 33 may be connected, outside of the common plane of the series of structural members. The operator then starts drill driving device and directs drill bit 26 through all of the structural members in the particular series. In other words, drill bit 26 first penetrates the second stud 46 from the doorway of FIG. 21 and then drills through the substantially horizontal brace 52 shown positioned between the second and third studs in FIG. 21. Drill bit 26 then drills through hte succeeding three studs at different levels until it approaches the other access opening 87. Thereafter, the remaining steps of the method may be carried out in the manner heretofore described with respect to FIGS. 3, 4 and 5 or in the manner heretofore described with respect to FIGS. 6, 7 and 8. It should be noted that, since shaft 27 is made from *a* relatively rigid but spring-like matAiai4 even though it is suspended in a somewhat cantilivered - man-

ner in its course between succeeding wooden structural members, the usual distance between such members is relatively short and the flexural rigidity of shaft 27 is such that all the holes will be very nearly axially aligned with each other through all the structural frame members.

FIG. 22 shows a series of substantially parallel floor joists 56 of a building with vertical walls or other obstructions 91, 92 adjacent opposite sides thereof. More particularly, FIG. 22 is another illustration showing how the improved drill may be employed for drilling substantially aligned holes through a plurality of relatively closely spaced wooden structural members embodied in the floor joists 56. It is to be noted that the operator may hold drill driving device 33 in a substantially vertical position and possibly with the aid of the flexing tool 70 or 70', the operator may bow spring-like shaft 27 of drill 25 where it initially extends through a pair of adjacent floor joists and may drill the holes through the successive floor joists in substantial alignment with each other, even though the axis of the drill as it leaves driving device 33 may extend substantially at 3 right angle to the substantially aligned axis of the holes 94 to be formed in the floor joists 56 of FIG. 22.

In the event that a vacuum cleaner conduit, a water pipe or a conduit for an electrical cable is to be positioned in the hollow wall W, it is apparent that there would be no need for connecting a pliable line to drill 25 following the drilling operation and before removing drill 25 from the wall. Also, if a rigid pipe or conduit is to be positioned in the series of structural members particularly shown in FIG. 21 or 22, it is likely that such rigid pipe or conduit would be installed before applying facings to both sides of wall W in FIG. 21 or against both the upper and lower surfaces of joists 56 in FIG. 22, although the holes may be drilled through the series of structural members according to the method steps particularly described with reference to FIGS. 21 and 22. Also if the rigid pipe or conduit to be installed is of relatively large diameter, the drill 25' of FIGS. 16 and 17 may be used, instead of drill 25, for drilling holes through the corresponding structural members.

In the drawings and specification there have been set forth preferred embodiments of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation.

I claim:

1. A method of installing a pliable line from an area outside of the confines of a hollow wall in and throuch the wall and at least one structrual obstruction therein; said method comprising moving a drill having a spring-like shaft with a drill bit secured to the leading end thereof through an access opening in one face of the wall while bowing the shaft to direct the drill bit along a path corresponding to the desired run of the pliable line; rotating the drill while applying a longitudinal force thereto to cause the drill bit to drill a hole throuch the structural wall obstruction in its path, ceasing rotation of the drill after the drill bit has reached an accessible area, connecting a pliable line to one end of the drill, and passing the drill through the drilled hole in a direction away from the pliable line to an area outside of the confines of the hollow wall to remove the drill from the wall while pulling the pliable line therewith to position a length of the pliable line extending through the hollow wall.

2. A method according to claim 1, wherein the connecting of the pliable line to the drill comprises connecting the same to the leading end of the drill, and said method further including rotating the drill at least during the passing of the drill bit through the previously drilled hole to facilitate removing the drill from the wall during the pulling of the pliable line therewith.

3. A method according to claim 1, wherein the connecting of the pliable line to the drill comprises connecting the pliable line to the drill comprises connecting the same to the end of the drill remote from the drill bit whereby the pulling of the pliable line through the wall may be effected without passing the drill bit through the previously drilled hole.

4. A method according to claim 1, wherein the connecting of the pliable line to the drill includes swivelly interconnecting the same so that the drill may be rotated without twisting the pliable line to facilitate removal of the drill from the wall during the pulling of the pliable line therewith.

5. A method according to claim 1, wherein the connecting of the pliable line to the drill includes swivelly interconnecting the leading end of the drill bit and the pliable line so that the drill may be rotated without twisting the pliable line, and said method further including rotating the drill in the opposite direction from that in which it was rotated during drilling of the hole, at least during passing of the drill bit through the previously drilled hole, to facilitate removing the drill from the wall during the pulling of the pliable line therewith.

6. A method according to claim 1, wherein the pliable line pulled through the wall is a pull line and said method further comprises connecting a pliable electrical conductor line to one end of the pull line, and pulling the other end of the pull line to withdraw the same from the wall while pulling the electrical conductor line therewith to position a length of the conductor lire extending through the wall.

7. A method according to claim 1, wherein the bowing of the shaft includes guidingly engaging the shaft at longitudinally spaced points within the hollow wall to facilitate directing the drill bit along the desired path.

8. A method according to claim 1, wherein the bowing of the shaft includes guiding:y engaging the shaft along its length at spaced points within the wall adjacent the access opening to impart a greater bow to the overall shaft while effecting a straightening of substantially the entire length of that portion of the shaft within the wall and while positioning the same to extend substantially parallel with the face of the wall.

9. A method according to claim 1, wherein the wall includes spaced apart opposing facings secured to said internal obstruction and wherein the bowing of the shaft includes curving the same into a bowed configuration along its length within the hollow wall with the apex of the bowed shaft bearing against the inner surface of that facing opposite from the facing having said access opening therein and with the drill bit initially engaging the corresponding obstruction closely adjacent the inner surface of the facing having said access opening therein such that the bit extends at art angle relative to the latter inner surface so that, when the drill is rotated, it bores a hole extending at a corresponding angle through the obstruction.

10. A method of providing successive holes through a series of spaced apart wooden structural members in a common plane, such as in a wall or floor structure of a building, for the purpose of positioning conductor lines or pipes therethrough; said methd comprising bowing art elongate spring-like shaft of a drill having a drill bit secured to one end of the shaft to position the drill bit within the common plane of the structural members and in contact with the first one of the series of structural members while positioning the other end of the shaft outside of the common plane of the structural members, rotating the drill while applying a longitudinal force thereto to cause the drill bit to successively drill holes through all of the structural members in the series, ceasing rotation of the drill following the drilling of holes throuch the series of structural members, connecting a Pliable line to one end of the drill, and removing the drill by moving the same in a direction away from the pliable line to pull the line therewith through the pre-

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)usly drilled holes while leaving a length of the pliable e positioned in the drilled holes.

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