

This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + Refrain from automated querying Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at http://books.google.com/

THE COMPASS.

A Journal of Hygiene and Homoeopathy.

VOL. IV.

Published Monthly.

Detroit, Mich., February 1893.

One Dollar a Year.

No. 2.

Entered at Detroit Postoffice as Second-Class Matter.

CONTENTS.

Published by Authority of the Grace Hospital Training School.

Page.
EDITORIAL19
ORIGINAL ARTICLES—
Kali Chlorium as a Therapeutic Agent,— C. S. Mack, M. D
Medical School of the Johns Hopkins University24 Surgical Treatment of Intestinal Obstructions —O Le-
Seure, M. D
SELECTIONS-
Wrinkles

	Page.
SELECTIONS.	
Action of Light on Bacteria	30
Hot Sand Bags	
Diet in the Uric Acid Diasthesis	
News Items From Grace Hospital-	
Report for January	32
Donations for January	32
Operations for January.	
MISCELLANY	34

CH. MARCHAND'S



TRADE MARK.

GLYCOZONE.

Prevents Fermentation of Food in the Stomach.

Most Powerful Remedy for Healing Purposes.

Cures Dyspepsia, Gastritis, Ulcer of the Stomach, Heart-Burn.

Send for Free book of 80 pages, giving articles by contributors to medical literature. Physicians willing to pay express charges will receive free sample on application. Glycozone is sold only in 4 ounce, 8 ounce and 16 ounce bottles. Never sold in bulk.

PREPARED ONLY BY

CH. MARCHAND'S Peroxide of Hydrogen

(MEDICINAL) H2 O2.
Endorsed by the medical profession
Used by the hospitals of the U.S.army

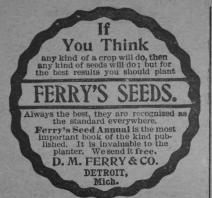
CHARLES MARCHAND,

Chemist and graduate of the "Ecole Centrale des Arts et Manufactures de Paris,

Laboratory, 28 Prince Street, New York.

Sold by Leading Druggists.

MENTION THIS PUBLICATION.



STAGE'S Electro-Therapeutic Institute

PROF. and MRS. V. STAEB

ELECTRO-THERAPEUTIC PRACTITIONERS

OFFICE AND PARLORS:

14 AND 16 BARCLAY PLACE

(NEAR PUBLIC LIBRARY)

DETROIT. MICH.

Martin Maier & Co.

TRUNKS, TRALELING BAGS, PHYSICIANS' CASES, Etc.,

Of our own manufacture for the Retail and Jobbing trade.
Retail Orders receive our prompt attention.

Office and Factory, 115 & 117 Twelfth Streef.
RETAIL STORE,

102 Woodward Ave.,
DETROIT. - MICHIGAN.

IF YOU ARE IN NEED OF . .

LABELS
CARDS
OFFICE
STATIONERY

WRITE US FOR PRICES

We are exclusively

DRUGGISTS AND PHYSICIANS PRINTERS

And can fill your order satisfactorily.

C. W. JOHNSON & CO.

44 LARNED STREET WEST DETROIT, MICH.

F. O. Dauenport

· INSURANCE

Insures Against Loss By ...
Fire, Accidents.

Plate Glass,

Fidelity Bonds, Boiler Explosions,

Bulks, Cargoes,

Elevators,

Employers Liability.

71 West Fort Street, Detroit, Mich.

(Opposite New Post Office.)

SUBSCRIBE FOR

"THE SABINET"

THE NEW AND HANDSOME

MUSICAL and ART

-\$1.50 PER YEAR

Twice its Value of Original Music in Each Issue.

EDITORS, H. G. GILMORE. A. H. GRIFFITH,

ADDRESS

"THE CABINET,"

11 West Atwater St., DETROIT, MICH.



WAGNER



Baking co.,

326 Woodward, and 378-380-382 Grand River. STEAM BREAD BAKERY AND CONFECTIONERY.

Ask for Wagner's Bread. For Sale by all Grocers,

John Blessed & Son,

GROCERIES AND MEAT DEALERS,

347, 349 & 351 Woodward Ave., Detroit.

TELEPHONE, 4132 AND 4565.

THE

WILTON-SMITH CO.

Printers

AND
Binders,

11 WEST ATWATER STREET.

Telephone 1141.

We will call for Magazines and Books, bind them nicely and return them promptly.

T. H. HINGHMAN & SONS, IMPORTERS AND

WHOLESALE DRUGGISTS,

76 & 78 Jefferson Ave., Detroit, Nich.

Farrand, Williams & Clark,

WHOLESALE DRUGGISTS,
32 and 34 Woodward Ave.

J. S. FARRAND, R. P. WILLIAMS, H. C. CLARK, J. S. FARRAND, JR.

WM. T. SIMPSON,

Only Successor to Jas. A. Foster, in Michigan, in the Manufacture of



FOSTER'S

PATENT UNION

ARTIFGIAL

112 & 114 Bates St., Detroit, Mich.

Descriptive Catalogues and Blanks for making applications for Government orders for Limbs and transportation or Commutation therefor, sent free on application.

ESTABLISHED 1870.

INCORPORATED 1889.

G. W. TOWAR, G. W. TOWAR, Jr.,
President. Vice-President.
F. J. TOWAR, Sec'y and Treas.

TOWAR'S WAYNE • • • COUNTY CREAMERY.

DEALERS IN

MILK, CREAM,

AND FRESH CREAMERY BUTTER.

Deliveries made to any part of the City.

TELEPHONE 365. DETROIT, MICH.

W. A. C. MILLER,

LUMBER,

ADAIR STREET.

Peninsular Savings Bank,

40 WEST FORT STREET,

Solicits PERSONAL, NOUSEHOLD and BUSINESS ACCOUNTS.

NTEREST allowed on trust funds deposited by trustees, guardians, executors and others, on favorable terms,

JOSEPH B. MOORE, CASHIER.

CONSTRUCTION COMPANY.

192 GRISWOLD ST DETROIT, MICH.

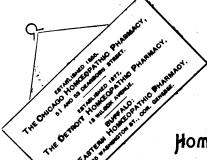
Private Residence Wiring Our Specialty.

G. T. CROOK. W. A. GRIFFIN.

Estimates promptly furnished on all classes of

ELECTRIC WIRING ELECTRIC BELLS, ANNUNCIATORS AND BURGLAR ALARMS.

All work certified to according to Michigan Inspection Bureau's rules and requirements. A full line of Electrical Supplies always on hand. Fan Motors in season.



SUCCUS PHYTOLACCA BACCA, An Antifat. A concentrated preparation of the inspissated juice, very efficient in the treatment of obesity. Prepared by HALSEY BROS.. Pharmacists, Chicago, Detroit, Buffalo.

HALSEY BROS.

Homoeopathie Pharmaeies

DETROIT, CHICAGO AND BUFFALO.

Physicians' and Family Supplies.

J. J. MITCHELL, MANAGER. DETROIT BRANCH:

13 Wilcox Ave., University Bldg.

J. S. CROOK & Co.

OF DETROIT.

DYNAMOS, MOTORS AND ELECTRICAL SUPPLIES. OFFICE AND STOREROOMS...

174 Griswold Street.

Williams, Davis. Brooks & Co.

Successors to

WILLIAMS, SHELEY & BROOKS and JAMES E. DAVIS & CO.

Wholesale Druggists

And Manufacturers of Fluid Extracts, Elixirs, Medicated Wines and Syrups, Doverina, Frangulaxine, Pepso-Dyastin.

Send for Descriptive Circulars.

AT THE OLD STAND,

COR. BATES AND LARNED STS., DETROIT

PICTURE FRAMES

And PICTURES

THE DETROIT
PICTURE FRAME
FACTORY

JEFFERSON AVE.

Tel. 326-4 Rings

A. S. GRAY, Manager.

The Inited States Baking 60.



In One Pound Packages, Handsomely

Labeled.
Serve with Lunches, Cheese, Salads, Ices, Wines, etc.

Fancy Graham

In handsome One Pound Packages.
The Finest Graham Wafers made.
Very Healthful.

Have them on the table.

Give them to the children.

UNITED STATES BAKING CO.

VAIL-CRANE DEPEW COPLAND

DETROIT BRANCHES.

+ + DETROIT + +

SHEET METAL

AND BRASS WORKS

Manufacturers of

Brass Furniture Hardware

Contractors for

STEAM AND HOT WATER HEATING AND SANITARY PLUMBING.

64 to 72 Orleans St., DETROIT, MICH.

J. FALTIS

Wholesale Dealer in and Shipper of

Poultry and Game

Orders by mail or telephone promptly attended to.

MARKET 301 WOODWAI'D AVE. DETROIT

Telephone 1131.

ଵେବବବବବବବ

COMPANY.

ARC AND INCANDESCENT ELECTRIC LIGHTING

AND ELECTRIC MOTOR POWER.

RESIDENCE LIGHTING.

Electricity is rapidly superseding gas as a dent illuminant. Have your residence resident illuminant. wired for connections.

OFFICE, 21 ROWLAND STREET. TELEPHONE 696.





Is the grandest success of the age. The process is applied directly to the gums, and the patients retain all their senses, while their teeth are EXTRACTED WITHOUT PAIN.

We execute all manner of dental work—Gold, Porcelain, Silver, Celluloid and Vulcanite plates; Bridge Work, Crowning, etc. For beauty, durability and usefulness, our work shall not be excelled.

AT Dental work performed at our patient's dwellings when necessary. 24 Washington Ave., cor. State St., Detroit. Tel. 2402.

DETROIT FLORAL CO.



CHOICE CUT FLOWERS.



470-480 JOHN R STREET.

DETROIT, MICHICAN TEL. 4010.

FORTUNE

"For who shall go about to Cousin Fortune" but he who knows where to buy

GOOD TEA

Scott & Co Square,

Are exclusive dealers in

CHOICE DELICIOUS

We can tempt the appetite of a sybalite And suit the pocket book of the laborer.

TRY US.

SCOTT & CO.

SIGN OF THE RED TEAPOT.

TELEPHONE 2399.

THE COMPASS

Published Monthly by the Grace Hospital Training School.

THE COMPASS COMPANY,

DETROIT, MICH.

HAROLD WILSON, M. D., 96 Miami Ave., Editor.

Send subscriptions to Publishers-Articles for publication, books for review, etc., to Editor.

Vol. IV.

FEBRUARY, 1893.

No. 2

EDITORIAL,

THIS is the only homoeopathic journal published in Michigan, and we hope to make it truly representative. It is moreover connected with one of the largest homoeopathic hospitals in the world. If you want to do a good thing for yourself and the profession, send your subscription to the publishers at once. Further, we invite articles for publication, news items, etc., from all of our readers. Send them to the editor.

OUR esteemed contemporary, the Medical Advance, has a mild paroxysm over the word female as applied to women, and scorning "gents" and "pants" as in the same category, gives vent to this somewhat surprising platform: "Breeches, gentletlemen, women, the law of cure and the indicated remedy are good enough for us." It would not do to be hypercritical in the face of such an evident desire to do the right thing by the English language, but we suggest that in polite society the word breeches is as little used as pants. Moreover, analogy suggests that if there are gentlemen, there must be ladies; or men, if women. However, we are pleased to see that the niceties of speech are beginning to attract a little attention in Chicago.

SPEAKING of women, we are glad to see that woman's place in the study of medicine has been pretty definitely settled by the Johns Hopkins University, by the acceptance of Miss Garrett's liberal gift, elsewhere referred to. Of course, no reasonable-minded person ever had any doubt that women were entitled to a medical education if they wished it. In fact, women physicians of skill and understanding mark every age in the history of medicine. Considering their opportunities, the prominence they have attained is rather remarkable. Yet there are physicians of the

present day who look upon their female colleagues as poor stuff because they are women. Evidently the Trustees of Johns Hopkins University are not men of this order.

NEWS of the reappearance of cholera in Hamburg, Marseilles, St. Petersburg, and other European cities, has already reached us. It is indeed doubtful if the disease has been entirely quiet during the winter. Everything tends to indicate that it will again reach this country as soon as warmer weather sets in. It is to be hoped that the national government will not wait until cholera ships are once more in the port of New York before taking active measures to keep the scourge out. It is said that in the recent Hamburg epidemic, camphor was not of much service in the treatment of cholera patients, but that arsenic seemed to be the genus epidemicus. The profession here may soon have an opportunity to find the indicated remedy for themselves.

THE following gem from the Medical Brief is worth reprinting:

CONVERGENT STRABISMUS.

I have a friend who was born with convergent squint in right eye. When he shuts left eye and looks through right, the left is crooked and right is straight; vision in right abnormal.

Would it injure the sight to have the eye straightened, or cause blindness? Would it improve his vision to make the eye straight?

F. C. DOREMUS, M. D.

Madison N. J.

This was printed without comment, as though the editorial intellect gave it up and submitted the weighty problems there propounded to the combined intelligence of the subscribers. We leave our readers to imagine what sort of a medical education the querist must have received, and how easy it is to edit a medical journal.

THE real status of corrosive sublimate as a germicide is beginning to be definitely recognized. As long ago as 1884, Klein stated that it had no more value as a germicide than vinegar, and although this seemed like an extravagant and unfounded statement at the time, the latest experiments indicated that it approximated the truth very closely. On the other hand, there has been a wide-spread belief that it was a germicide of the highest value, and that even in very dilute solutions it was rapidly fatal to all kinds of bacteria. Upon the basis of this belief, its use in



operative surgery has been very general during the past ten or twelve years, and it has many enthusiastic advocates. there is, or has been a misconception as to the real action of the drug upon bacterial life. It has been credited with the power to destroy this life, when all that it actually did was to inhibit it. is now known that mercuric chloride forms with cellulose, silk, albuminous bodies, and with the bacteria themselves, an organic compound that is insoluble in water. When under the action of sublimate, the germs have become invested with this compound, all further manifestations of activity upon their part is at an end, so long as this compound remains intact. If anthrax bacilli are subjected to the action of sublimate, say 1-1,000, they will not grow in the ordinary nutrient-media, but if treated with hydrogen-sulphide, or saline solutions, they soon regain their wonted activity and develop as usual. If some of these bacilli, that have been acted upon by sublimate, are placed beneath the skin of a guineapig, the animal will die with the usual symptoms of anthrax, and anthrax bacilli will be found in abundance in various remote parts of the body, showing that the germ has lived and multiplied.

The conclusion of the matter is, that sublimate is capable of inhibiting the growth of bacteria, and that this inhibition is permanent and safe, so long as the bacteria are not exposed to the action of solvents, but that we must not rely upon the drug to destroy the vitality of bacteria, at least as it is ordinarily employed. For surgical purposes it is much more safe and more rational to rely upon the germicidal properties of heat, to sterilize everything that can be subjected to this agent, and for the rest, to place more dependence upon mechanical than upon chemical antisepsis.

ORIGINAL ARTICLES.

KALI CHLORICUM AS A THERAPEUTIC AGENT.

By C. S. MACK, M. D., ANN ARBOR.

CHLORATE of Potassium was discovered in the latter part of the last century, and was soon introduced as a medicine in the belief that, by reason of the large amount of oxygen it contains, it would destroy by oxidation some material cause of disease in the blood. I suppose that no one today would accept this idea, but we may in passing note a belief which many today do accept: it is that under the influence of the drug the hæmoglobin undergoes

oxidation, and is thus converted into methæmoglobin. Many of the present writers seem to regard this change in the blood as the proximate cause of various of the drug's effects; and, in regard to some of these effects, they may be right.

In the early part of the present century, great value was attached to the chlorate of potassium as a medicine, but the confidence in it was not long-lived, and it soon fell almost into disuse. After some years the use of it was revived, and perhaps the most striking feature in its history as a medicine was the practice of giving it in large doses to patients with diphtheria. I need but remind you of how prevalent that practice was when in 1879 Dr. Jacobi, of New York, collated eleven cases fatal from the drug, and other cases in which it seemed a question whether death had been due to a nephrits caused by the drug, or to diphtheria. Since that time the dangers of such practice have come to be largely recognized. In 1880 H. C. Wood said he had "never seen it do a particle of good," and in 1890 Hare said: "In diphtheria it is very commonly employed, but its use is exceedingly dangerous. Death in many cases of diphtheria is due to the renal irritation present, as acute nephritis, and this drug simply increases the disease-pro-If the chlorate of potassium is employed in diphtheria it should be used on a swab in solution." Perhaps there is no drug the history of which more clearly illustrates the fact that in giving poison to a patient, one's first care should be not to harm him.

After this glance at the past history of the drug as a medicine in the hands of old-school physicians, let us consider some details of its pathogenesy, which seem to justify the hope that it will prove valuable in the hands of homœopathists.

One practice which has been claimed as homœopathic, and I think justly, is that of giving the drug to patients with ulcerative stomatitis and aphthæ, or with mercurial or simple salivation. Such pathogenetic effects of the drug are illustrated in the last six cases under "Poisonings" in the Cyclopædia of Drug Pathogenesy. Of interest in this connection is the following, which I quote from Ringer: "This salt appears to increase the flow of saliva, and, according to Hutchinson and others, to produce ulceration of the mucous membrane of the mouth. It is largely used in various affections of the mouth, and is of signal service in mercurial and simple salivation, in ulcerative stomatitis and aphthæ. It is particularly useful in the ulceration of the edges of the gums, generally limited to one side of the mouth, affecting both the upper



and lower jaws; also that part of the tongue and cheeks coming in contact with the ulcerated gums. * * * * The influence of the chlorate on this form of ulceration is almost magical; in one or two days it cleans the dirty-looking ulceration, and heals it in a day or two more." It is a fair question whether in some of these cases the benefit is not due to a local germicidal action in the mouth. To me it seems hardly probable that it is. Though the drug is something of an antiseptic, Von Becker, physician in 1877 to the Children's Hospital in Vienna, is reported to have said that "while it is the mildest, it is also the least efficient of disinfecting agents." [See Stille and Moisch's National Dispensatory for 1880.]

Regarding the very common practice of using chlorate of potassium, either as a gargle or internally, in treating a patient with tonsillitis, it is not so clear that it is homeopathic. Among the seventeen provers in the Cyclopædia of Drug Pathogenesy there are but four in whose records I find any support for the view that this drug is homeopathic to sore throat. Prover 3 records (who took the crude drug in from 1 to 5 gr. doses), "Dryness in the throat, hoarseness"; prover 6 (who took low trituration and the crude drug-largest dose being 4 gr. of crude drug), "Scraping in throat"; prover 12 (who took 1-5 gr.), "Dryness in throat and chest, with cough and constriction of chest as from sulphur vapor"; prover 13 (who took doses of from 5 to 15 grs.), "The muscles of the palate felt contracted, and the mucous membrane of throat and mouth appeared tanned, as from tannic acid." In Poisoning 5 a man who was "in the habit of taking kali chl. largely for chronic throat trouble * * fell ill with feverish sore-throat, after having taken more of drug than usual."

Epistaxis might in some cases indicate this drug as homœopathic. Epistaxis occurs in some cases of serious poisoning; it occurs, too, in the records of provers 3, 4 and 8—one of them records "violent epistaxis"; another had nose-bleed four times during his proving. These hæmorrhages may perhaps be due to the changes in the blood mentioned above, as may also a hæmorrhage mentioned by prover 6, viz: "Gums bleed readily when brushing teeth." It is possible that this is a drug which would be more or less indicated by hæmorrhages generally.

Coryza and sneezing seem proper indications for the drug. Seven provers record one or both of these effects. (See provings 3, 4, 5, 6, 7, 8, 9.)



Hæmorrhoids occurred in two old-school provers, each of whom took the drug in doses up to one ounce. In one of them it is recorded that he had never before had hæmorrhoids.

The well-recognized fact that nephritis may be caused by the drug might sometimes lead us to use it as homœopathic to nephritis. Though this effect is sometimes attributed to a local irritant action of the drug in the kidneys, and through crystals of the drug have been found post mortem in the kidneys, I think we should at present not be justified in concluding that nephritis is not a dynamic effet of the drug.

In serious poisonings by chlorate of potassium, jaundice is sometimes observed. One or another skin eruption is common in the records of provers. The tendency of the drug to produce skin eruptions as well as nephritis and, perhaps, sore throat, suggests that it might sometimes be curative in treating a patient with scarlet fever. These same pathogenetic effects suggest that in some cases of diphtheria it might be more or less homeopathic.

In some cases of serious poisoning a marked enlargement of the liver and spleen has been noticed post mortem. In one case the spleen post mortem was "six times its normal size." Enlargement of the spleen has been made out ante-mortem. (See Encyclopædia of Drug Pathogenesy Poisonings, 4, 5, 6, 7 b, 7 c and 10).

—Read before Hom. Med. Soc. State of Michigan.

MEDICAL SCHOOL OF THE JOHNS HOPKINS UNIVERSITY.

MISS MARY E. GARRETT, of Baltimore, has given to the Board of Trustees of Johns Hopkins University the sum of \$306,977 for the purpose of opening a Medical School for the education of men and women upon equal terms. By the terms of the gift, if at any time there should be any inequality in the privilege or duties of the two sexes, it shall be forfeited to her or to her heirs. The Medical School is to be an integral part of the University, and will have a four years' course leading to the degree of Doctor of Medicine. The standard for admission to the school is that required for matriculation in the University, and that given in the preliminary medical course now in operation. A \$50,000 building, to be known as the "Woman's Fund Memorial Building." is to be built. The fourth stipulation of the gift is as follows:

"4. That there shall be created a committee of six women to whom the women studying in the Medical School may apply for advice concerning lodging



and other practical matters, and that all questions concerning the personal character of women applying for admission to the school and all non-academic questions of discipline affecting the women studying in the Medical School shall be referred to this committee, and by them be in writing reported for action to the authorities of the University; that the members of this committee shall be members for life; that the committee when once formed, shall be self-nominating, its nominations of new members to fill such vacancies as may occur being subject always to the approval of the Board of Trustees of the University, and that the first members shall be Mrs. Henry M. Hurd and Mrs. Ira Remsen, both of whom were active members of the Baltimore committee of the Woman's Medical School Fund; Mrs. William Osler, Miss M. Carey Thomas and Miss Mary M. Gwinn, the two friends who have been most closely associated with me in promoting the opening of the Medical School, both of whom are daughters of Trustees of the University, and myself."

This generous gift of Miss Garrett's was accepted by the Board of Trustees December 24, and the school in question will be opened in October, 1893. From the large amount of money at the disposal of the trustees, and from its connection with Johns Hopkins University and Hospital there is no doubt that the new school will at once take rank as one of the foremost medical schools in this country.

SURGICAL TREATMENT OF INTESTINAL OBSTRUCTION

By O. LESEURE, M. D., DETROIT.

N selecting this subject I had in view the discussion of the medical and surgical aspect of acute intestinal obstruction and to determine more definitely, for myself, where one should end and the other begin.

The medical treatment is limited to medicines given internally, with little in the way of statistics to support them—anodynes perhaps to allay pain. Inflation has been more or less practised since the time of Hippocrates. Distension by forced injections with inversion of the patient; massage and electricity before any inflammatory symptoms develop; -- gavage of the stomach--and oleaginous laxatives—are other means that have been used. It is difficult to obtain any definite statistics of the general mortality of intestinal obstruction. But of intussusception which form about 43 per cent. of cases of acute obstruction, 70 per cent. die, and 80 per cent. of the fatal cases die before the seventh day. (Treves). Lichtenstirn places the mortality at 90 per cent. According to Fitz, the physician "is called upon to remember that nearly all cases of acute mechanical intestinal obstruction die unless relieved by surgical interference; that curative medical treatment has proven of positive service in only a limited number of cases of intussusception, possibly in a few of volvulus in the large intestine and in certain cases of gall-stone in small intestine; that his first duty



after relieving pain is to determine the capacity of the large intestine; that this is best accomplished during the first two days following the initial pain, before tympany makes the task more difficult and pathological changes cause it to be more dangerous, finally that the means employed for this purpose represent the most efficient agent in his control." We know how quickly pathological changes occur in all cases where the peritoneum is involved either directly or sympathetically—and how rapidly the general system suffers through the great sympathetic when the intestinal tract is seriously affected and shock and collapse warn the practitioner that a fatal result is fast approaching. It is not necessary to tax your patience in the effort to prove that acute intestinal obstruction is rapidly fatal in the great majority of cases.

What is the position of the surgery of to-day? It urges that the practitioner determine best the presence of acute intestinal obstruction, its location, and its probable cause. Secondly, that he apply certain therapeutic and mechanical means during a period of two, possibly three days for the relief of the obstruction; that these means failing, surgery offers two methods of treatment, laparotomy and enterostomy. To determine how much additional risk the operative methods add to the disease, we may look to the general statistics of laparotomy. The best is Lawson Tait's—less than 4 per cent. The general statistics of colotomy including operations for intestinal obstruction is 37 per cent. There was a time even as late as the middle of the present century when the profession felt that to touch the peritoneum was to court death but the work of Spencer Wells, Koeberle, Keith and others, proved beyond controversy that it is not touching the peritoneum but poisoning the peritoneum which is so fatal.

	•	STATISTIC	CS,		
	Cases.	Recovered.	Died.	Not rep.	Per ct.
Ashhurst,	43	13	30	<u></u>	69.7
	230	68	155	7	67.4
61	346	104	235	7	69.3
Curtis,	328	102	226	-	68.9
Peyrot,	125	46	79 (M	ost operated out 7th day.)	63
Treves,	122 (E	xclusively ussusception)	\ L .	out im day.	63
"	33 (Intussusception)				72.7

Considering mortality of Intussusception to be 70%, and supposing as is the rule that many if not most of these 33 cases were operated upon late and were desperate cases the statistics are better under the operation. Treves gives another division where reduction of invagination is performed easily the mortality is only 30%, and where very difficult 91.3%.

Rydygier, Schede,	7	2	5	 71.4
Schede,	. 26	7	19	 73. I
Steltner,	8	4	4	 5ö

What does the operation promise? Quoting from an analytical paper by C. F. Curtis on Enterostomy. The mortality was 48.3. Relief was given in 72 per cent. Six were not relieved because the fistula was established below point of obstruction. In 60 per cent. of the recoveries, normal passage per annum was restored in a period varying from one day to ten weeks. Quoting from the same authority—In 328 cases of laparotomy, the mortality was 68.9 per cent. Of the 328 cases 5.8 per cent. were fatal because of failure to remove the obstruction. Laparotomy is to be preferred where the patient can bear the shock of the longer operation, and where the distension is not so great as to prevent a thorough examination of abdominal cavity.

TIME TO OPERATE.

In recent discussions of American, English and Continental surgeons, the great majority favor early operations if at all. Crede says while colicky pains are intermittent as collapse quickly follows an impassable obstruction. Schede and Mikulicz wait for Steltner operates early and has a mortality of signs of collapse. fifty per cent. Reclus says that "as soon as the diagnosis has been established in its principal characters, open the abdomen without hesitation." Fitz claims that all cases of acute abdominal obstruction are surgical after the third day. With the exception of Schede and Mikulicz all operators claim the high rate of mortality to be chiefly due to the tendency to postpone the operation till collapse threatens. H. C. Dalton, of St. Louis, in referring to one of his cases, says: "I have reproached myself very much for the result in this case, and the lesson I learn from it is that delays are dangerous; (the operation was on the fifth day) that if we expect to save cases of intestinal obstruction, we must open the abdomen early."

THE OPERATION.

The history of the operation of laparatomy for intestinal obstruction dates back to Praxagoras of Cos, who operated more than two thousand years ago. Three hundred years later Leonidas, of Alexandria, performed the same operation. No mention is made of it in the middle ages and it is revived towards the end of the Fifteenth century by Paul Barbette, of Amsterdam, and again in the Eighteenth century by two surgeons whose names are not known. As late as 1852 the French Academy discountenanced any discussion of the operation and it was not until the ovariotomists before alluded to, demonstrated the success of abdominal

sections, that the subject became prominently considered, and each year grows more important. In conclusion I will quote from "In acute intestinal obstruction our Lloyd, of Birmingham: attention should be primarily directed to the strangulation of the walls of the bowel rather than to the stoppage of feecal matter. When strangulation exists immediate operation is demanded. all obstructions above the rectum calling for operation, median abdominal incision is the proper primary procedure. When the abdomen is opened the examination of its contents should be systematic and expeditious, the hand being introduced into the abdominal cavity if necessary, and if the obstruction is not speedily discovered the most distended coil should should be fixed to the skin and opened at once. If the large intestine be involved, the cæcum, or sigmoid should be brought through a special opening in the groin. With proper precaution a few feet of bowel may be withdrawn from the abdominal cavity and returned without difficulty and without serious risk. Rapidity of procedure with minimum of disturbance are essentials of operative success.'. -Read before Hom. Med. Soc. State of Michigan.

SELECTIONS.

WRINKLES.—Wrinkles on the face are the most subtle and effective destroyers of beauty, in man no less than woman. An octogenarian whose face is as plump and smooth as was her baby face, forms a wondrous example of the lasting qualities of her richest possessions.

A young lady of 20, around whose mouth and eyes visible furrows are already drawn, shows unhappily a premature decay. Already she knows the power of the skillful dentist, and will readily consult him. To preserve the beauty of the teeth is a necessity well known to be incumbent upon those who are in early as upon those in mature life,

But every one should know that the eye is the chief adornment of the face. Yet the face finds just here its most remorseless foe. Two conditions require notice: 1. Abnormal refractions; 2. A loss of muscular equilibrium in the movement of the eye-balls.

Just for a moment squint your eyes before a mirror. Let the fairest face you can find repeat this a thousand times, and you will see the shadowy forms of lines, that need only a little more encouragement, a few more repetitions to stay there forever.



It is easy to find on our crowded thoroughfares, almost any day, hundreds of natu ally beautiful faces, furrowed with ineradicable lines, the deformity doubtless due to uncorrected ocular troubles. An imperfect vision generally calls into action nearly all the muscles of the face, causing inco-ordinated contraction. From youthful beauty to seeming premature age is but a step.

Skillful strabismus operations often restore lost beauty. A bad operation may be worse than none. But by the hand of the intelligent operator, what artistic, cosmetic effects are produced! But strabismus cases form an immaterial part of the ocular causes that destroy beauty.

In the list of Errors of Refraction, or what is classed under the general head of Ametropia, we have what is now well known to many of the general profession as *Presbyopia*, from old age; *Hypermetropia*, from a relative small eye-ball; *Myopia*, from a relative large or perhaps only a deep eye-ball, and *Astigmatism*, from irregular curvature of the cornea or lens.

Now it is a well-known fact also that each of these conditions renders the vision imperfect. But the fact if not so well known that the uncorrected persistence of either, rapidly produces a wrinkling of the face, and brings on an unwarranted appearance of age, and I may say, criminal loss of beauty.

A handsome face of two and twenty years commences to wrinkle. Sad, is it not? But it was so with her mother and her grandmother. It is hereditary. Well, not the wrinkles are inherited, but the ametropic conditions of the eye. All the family are hyperopic or astigmatic, and all grow old too early.

I have already clearly stated how the correction of such anomalies of refraction will preserve the beauty of the face.

Since we are now to enter upon a new field, we must venture upon the use of some new terms. The action of what is known as the external muscles of the eye, brings us to face some new facts. If these muscles are in unison, they preserve the normal position of the eye-balls. If but one of them, wholly or in part, fails in its duty, a condition of disorder is introduced. Based upon the general word—root phoros, meaning a tendency, we are able to construct a fitting arrangement of terms. (Stevens.)

If the weakness is in the rectus internus, then we have Exophoria, meaning a tendency to turn out. If it be in the rectus externus, then we have Esophoria, meaning a tendency to turn in.

Under the general head HETEROPHORIA, we class all kinds of tendencies to muscular deviation, among which is one we have not

yet named, but known as *Hyperphoria*, meaning a tendency to turn up. All this may be simplified by considering that the anomalous tendency of an eye-ball to deviate, is generally upward or downward, or inward or outward.

I have now only time to add this: As in ametropia, so in heterophoria we have ever efficient causes of the loss of beauty.

But in conditions in which there is lacking co-ordination of muscular action, we have more frequent and lasting causes of evil, because they can be discovered and corrected only by expert hands.

Many doctors do not believe this, much less do their patients accept it as true. But give the oculist, who is an artist, ful jurisdiction over these cases, and you could not estimate how much would be added to both the male and female beauty of our race.

Patients who would give thousands to preserve the symmetrical rotundity of their faces, may never know how easy it would be to eradicate wrinkles formed, and prevent others forming.—T. P. Wilson, M. D., Ohio Hom. Medical Society.

ACTION OF LIGHT ON BACTERIA. -The author begins his communication with a short expose of experiments instituted by him on the noxious action of light on bacteria which had been repeatedly ascertained by former observations. By extending the field of his investigations to the bacteria suspended in water and by varying the secondary conditions, such as access of air and the like, in many ways, he was able, with the aid af the gelatine plate culture, to demonstrate conclusively a powerfully disinfecting action of light on all bacteria hitherto examined. B. typhi. coli communis, hyocyaneus, cholera vibrio—and on some bacteria of putrefaction. Thus in water which in the beginning of the experiment showed in one ccm. ca. 100,000 germs of b. coli communis, was entirely free of any germ after a single hour of direct action of sun-light. Diffuse day-light also displayed a considerable disinfecting action, although not quite as strong as direct rays. even addition of alimentary substances would impair this action.

The author draws from these facts some important conclusions connected with the practical value of light as a disinfectant:

- 1. All former experiments on the life of bacteria in water, which have failed to take into account the influence of light have lost their conclusiveness.
- 2. The often discussed and ventilated self-purification of rivers and lakes in connection with a decrease in the number of living



bacteria finds—without excluding the auxillary action of other elements—a satisfactary explanation in the disinfecting action of light. The author recommends the practical application of these theoretical results by eventual intromission of sewerage waters of cities into flat clarifying basins provided with a white cementation.

We may add that in many species of bacteria the disinfecting action of light was not demonstrable, but these same bacteria, belonging to the class of genuine aquatic bacteria, are harmless in a hygienic respect.—Centralblatt f. Bakt. und Parasitenkund.

HOT SAND BAGS.—A writer in the Nightingale says: The sand bag in invaluable in the sick room. Get some clean, fine sand; dry it thoroughly in a kettle on the stove; make a bag of flannel about eight inches square; fill it with dry sand; sew the opening carefully, and cover the bag with cotton or linen. This will prevent the sand from sifting out, and will also enable you to heat the bag quickly by placing it in the oven or on top of the stove. The sand holds the heat for a long time, and the bag can be tucked up to the back without hurting the invalid. It is a good plan to make two or three of the bags and keep them on hand ready for use at any time when needed.

DIET IN THE URIC-ACID DIATHESIS.—This should consist of vegetables, fruits and milk, excluding meats, or only allowing small quantities of fish and fowl. I allow no coffee, and tea and cocoa only in moderate quantities, and very weak. I find coffee very harmful, and strong tea equally so.

Of vegetables, I forbid baked beans, boiled cabbage, watermelons, all of which I have found to increase the trouble. the fruits, strawberries seem to cause the most disturbance. this to the presence of a peculiar acid contained in them. many of my patients have been obliged to give up eating strawberries. Blackberries and raspberries are also harmful, possibly because of the constipation they produce. Sugars and sweetmeats of all kinds should be indulged in very sparingly. Many patients tell me that in 20 minutes after eating confections or sweets they become conscious of a very disagreeable, sour taste in the mouth, as though the sugar had already undergone fermentation. of good, plain food, well cooked, may be taken, and four times a day, if the desire exists. Much milk may be drunk. should be kept active by frequent warm or hot baths at night, and by a cool plunge or sponge-bath in the morning. Regular hours

should be kept, with plenty of sleep, and the laws of health in general observed.

No spirituous or malt liquors of any kind should be allowed; they are all harmful in any quantity whatever. Plenty of water should be drunk; water that has been boiled and then cooled is best. The majority of persons do not drink enough water. system needs flushing as well as the sewer. Professor Haig's conclusions seem to be that the troubles arising from uric acid do not so much depend upon an excessive formation as from an accumulation in the system as a result of defective excretion. own observations and experiments made upon myself and others lead me to agree fully with him upon this point. When excretion has been defective for a period of time, the system becomes filled with acid, and the various symptoms already mentioned manifest themselves. Then we must not only prevent increased formation by regulating the habits and diet of our patients, but we must also prevent retention by the same means, and get rid of that which has already accumulated. - Dr. N. Wiest in Medical News.

NEWS ITEMS FROM THE GRACE HOSPITAL.

REPORT FOR JANUARY.

There were treated during the month of January, 139 cases; of this number 45 were free cases to whom were furnished 714 days' treatment. There were 287 visits to the dispensary; of this number 81 were new cases. The ambulance made 45 runs, bringing in 28 patients and taking home 14. The expenses for the month were \$3,983.29 and the earnings were \$1,857,74. The monthly income from the endowment is \$1,500, leaving a deficiency of \$625.55.

DONATIONS FOR JANUARY.

Detroit, Belle Isle & Windsor Ferry Co., one hundred coupon tickets; Laboratory Reading Association of P. D. & Co, reading matter; Drs. Olin and Le Seure, 30-cell battery; R. L. Polk & Co., city directory '92; Janitor Masonic temple, books and papers; Taylor, Woolfenden & Co., papers; Mrs. E. J. Carrington, four towels; Mrs. Johnson, books and toys; Detroit Home and Day School, books and papers; the Ladies' Committee, twelve white night shirts, twenty-four night shirts, assorted, twenty-four



very heavy night shirts, four quilted shirts, fourteen all white night shirts, five colored embroidery night shirts, twenty-four ladies' night dresses, six children's night dresses, twelve sheets, six flannel gowns (men's wear), four seersucker gowns (ladies'), three dozen table napkins, two table doilies (figured), five tray covers, thirty-six towels; forty-nine and three-fourths yards toweling, two hair brushes, forty-three yards mangle cotton, two hash bowels, two dozen white thread, two coffee boilers, one tea pot, one gallon measure, one spring bed, two ice cream measures, six dozen oranges, two picture frames, one hair brush, three dozen ind. pitchers; For Mary bed, Mary Thompson, Mary Reser, Mary Hastings, Mary Howard, each ten cents.

OPERATIONS FOR JANUARY.

Abscess of axilla opening	I
" of foot	I
Amputation of breast	1
CERVIX, dilation of the	I
CIRCUMCISION	I
CHANCROID of vulva, cauterizing	1
" opening bubo	1
Curetting ulcer	1
Fistula in ano	1
FRACTURE for ununited	1
HERNIA by incision	4
" by injection	1
Ovariotomy, double	6
Perinæorrhaphy	2
RESECTION, head of humerus	1
Scar tissue removed	1
Suturing abdominal wound	1
" severed nerve	1
Trachelorrhaphy	2
Varicocele, radical operation	1
Vertebræ, for caries	1
Wounds, incised	1

MISCELLANY.

SUBSCRIBE now.

SEND one dollar to the publisher.

Do NOT fail to read our advertisements.

DR. G. P. Cooley, Jr., late house surgeon, The Grace Hospital, has returned to Detroit and opened an office at 401 Woodward avenue.

DR. ARTHUR E. GUE, late house surgeon, The Grace Hospital, has opened an office at the corner of the Park and Witherell streets.

Marchand's peroxide of hydrogen (medicinal) has been the object of some recent strictures by Dr. Jacobi. From what we have read of the controversy, the drug seems to have successfully maintained its well recognized position as a valuable and safe therapuetic agent. It is usually admitted that the peroxide deteriorates with age, but we had occasion not long ago, to open a bottle that had stood in our office a year and a half. The peroxide was as active and powerful as if just made, and proved entirely satisfactory.

DR. J. C. NOTTINGHAM, president of the state society has made the following appointments: Committee of Delegates to the International Homeopathic Congress—H. C. Brigham, M, D., Grand Rapids, chairman; R. C. Markham, M. D., Marquette; R. C. Olin, M. D., Detroit. Member of the Board of Control—To succeed the late Dr. Eldridge, H. C. Brigham, M. D., Grand Rapids.



AS a SUPERIOR TONIC for the SICK, AS a RESTORATIVE for the DEBILITATED, AS an INVIGORATOR for the AGED and INFIRM, AS an APPETIZER and UNEXCELLED HEALTH INDUCER for ALL,

Our Celebrated Wines

HAVE NO EQUAL.

The Purest and Best is Always the Cheapest



Our Wines are Guaranteed Strictly Pure Grape Juice. Of the Best Quality.

FOR MEDICINAL AND FAMILY USE.

REING GRAPE GROWERS, AS WELL AS

Large Importers of Foreign Wines,

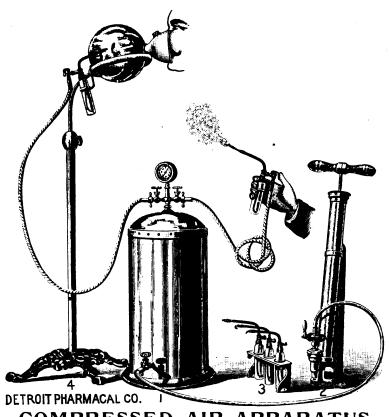
WE CARRY A LARGER STOCK, AND HAVE SUPERIOR FACILITIES FOR SUPPLYING A GREATER VARIETY AND BETTER CLASS OF

Fine Wines

THAN ANY OTHER HOUSE'IN THE STATE.

WRITE FOR SAMPLES.

Physicians' Samples Sent on Application-



COMPRESSED AIR APPARATUS



COMPLETE

• ELEGANT ____
PRACTICAL

For Spraying Alcoholic, Aqueous or Oily Substances

SEND FOR PRICES AND DESCRIPTIVE CIRCULARS

APODYNA

ANTI-PYRETIC

ANALGESIC

ANTI-RHEUMATIC

This new synthetic product, whose base is a coal tar derivative, possesses all the advantages of the most approved Anodyne, Nervine. Sedative, or Hypnotic, and can be used without danger of untoward after effects. Its most efficient action is fully set forth in a circular which we shall be pleased to send together with a sample of the product to any physician making application.

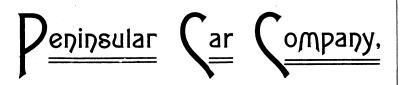
DETROIT PHARMACAL COMPANY

MANUPACTURERS AND JOSSERS OF PHYSICIANS' SUPPLIES

95 and 97 Woodward Ave.

DETROIT, MICH.

MICHIGAN



MANUFACTURERS OF ALL KINDS OF

FREIGHT CARS.

BOX, FLATS, COAL, REFRIGERATORS.





WHEELS, AXLES, BAR IRON, ETC., ETC.

DAILY CAPACITY, 100 CARS, 800 WHEELS, 150 AXLES, 150 TONS BAR IRON.

SHOPS: WEST DETROIT AND LAKE SHORE JUNCTION. OFFICE: NO. 1 NEWBERRY BUILDING.



DETROIT, MICHIGAN.

CHARLES CUNNINGHAM,

CATERER AND CONFECTIONER.



ICE CREAM,

*

FRUIT ICES AND

Silver, Linen and Dishes to Rent.

Wedding and Birthday
Cakes a Specialty.

Everything of the Finest Quality and Rates Reasonable.

309 WOODWARD AVENUE.
TELEPHONE, 4794.

R. S. WEBB, President. C. D, STANDISH, Sec'y & Treas.

WEBB STANDISH & CO.,

WHOLESALE & RETAIL

DEALERS IN

CHOICE MEATS

OF ALL KINDS.

269 to 285 Grand River Avenue,

DETROIT, MICH.

ARE YOU SURE

YOUR HOME IS FREE FROM SEWER GAS?

If your Baths, Sinks, Laundry-Tubs and Wash Tubs are fitted with the

"CLEAN SWEEP"

NON-SYPHON SEWER GAS TRAP.

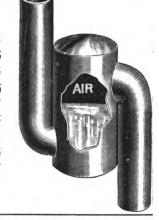
You are safe from Sewer Gas and its attendant dangers. Have your plumber put them in; he knows they are the best.

DETROIT SANITARY SUPPLY CO.,

Sole Manufacturers.

37-41 FIRST STREET.

(Correspondence Solicited.)



PITTMANS & DEAN, PEOCOCK & SON, HALL & ASHLEY,

PITTMANS & DEAN GO., COAL AND ICE. Wood, Coke, Charcoal and Kindlings.

OFFICE.

94 Griswold St.,

Detroit.

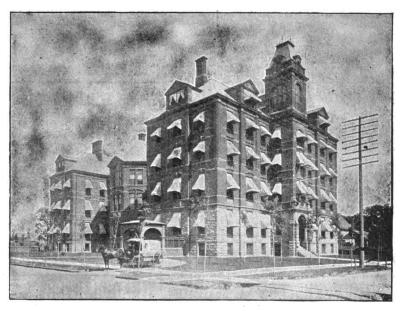
Telephones, 275 2-R. & 543.



THE GRAGE HOSPITAL

HOMŒOPATHIC.

Cor. WILLIS AVE. and JOHN R. ST., DETROIT, MICH.



A GENERAL HOSPITAL for the reception and treatment of all cases, medical or surgical. Specialists in each department.

Nine wards built on open wings of the Hospital, thereby securing perfect light and venillation.

Special ward for children. A special ward for obstetrical cases.

Gas and electric lights.

Twenty-one private rooms beautifully furnished, and with every modern convenience, wherein patients have the comforts and privacy of their homes.

Private rooms containing two beds, \$9.00, each bed...

Private single rooms, \$10.00 to \$20.00 per week.

Massage, as a special treatment, given at the Hospital, or at the patient's residence.

Electrical treatment given.

THE GRACE HOSPITAL SCHOOL OF NURSING will furnish trained nurses for private duty.

An Ambulance Service and a Free Dispensary in connection with the Hospital.

Ambulance will meet very sick patients at the station and transfer them to the Hospital, if the Superintendent is notified in time.

For further information, address

ROBERT H. SILLMAN, Superintendent.





A. KUHLMAN,

203 JEFFERSON AVE.



SURGICAL INSTRUMENT DEPOT.

Special attention given to manufacturing and fitting Trusses, Deformity Apparatus, Elastic Stockings, etc. Best and latest instruments at lowest prices. Quotations furnished on application.

Instruments Repaired and Plated. Telephone 287

A.KUHLMAN

TELEPHONE 282.

ESTABLISHED 1849.

L.B.KING & CO.

CROCKERY,

GLASSWARE,

LAMPS, Etc.

103 Woodward Ave., Detroit, Mich.

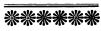
WE TENDER our distinguished consideration to everyone who is interested in Grace Hospital. If we can make it so interesting for you, that you will become interested in us to the extent of all your purchases of Hardware, (and other goods too numerous, etc.), we shall be glad!!

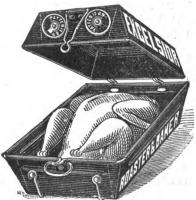
T. B. RAYL & CO., 112 & 114 Woodward Are.

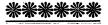
HOUSEKEEPERS' EMPORIUM HEADQUARTERS.

<u>*****</u>

Refrigerators, Ice Boxes, Cedar Chests, Gasoline, Artificial and Natural Gas Stoves, French Cafeters,







Vienna Coffee
Maker,
English Soup
Digester,
Rogers' Cutlery,
Russian Swing,
Tea Kettle.

Wrought Steel Ranges and Cook Stoves.

CHOICE HOUSE FURNISHING = COODS FROM ALL COUNTRIES

Telephone 478.

D. S. PHELPS COMPANY

74 Woodward Ave.





Digitized by Google

BOLTON HOT WATER HEATER



WOMAN'S HOSPITAL, AND FOUNDLING'S HOME, BEAUBIEN ST. AND FOREST AVE., DETROIT,

HEATED BY DETROIT HEATING AND LIGHTING CO.'S BOLTON HOT WATER HEATER.

DETROIT, MICH., Sept. 16, 1892.

I wish to express my gratification with the results obtained from the Bolton Hot Water Heaters in the Woman's Hospital and Foundling's Home. manner, and has more worked in a perfectly satisfactory manner, and has more than met our expectations.

HELEN E. CONKLING, President CAN HEAT
ANY BUILDING
ANYWHERE

THOUSANDS IN USE.

Send for Catalogue and Booklet
"PERFECTLY HEATED
DETROIT HOMES."

DETROIT HEATING and LIGHTING COMPANY

Sole Manufacturers

LIEB AND WIGHT STS.

DETROIT, MICH.

CHICAGO

NEW YORK, BOSTON.

Manufacturers also of the

Combination Gas Machine

Best Independent Lighting Apparatus.

USE * * * *

Henkel's BEST "Royal Star" Flour for the finest pastry, cake, etc., and extra fine white bread.

Henkel's Roller Patent "Commercial" Flour for general family use—especially adapted for bread—makes a sweet light loaf.

Henkel's Pure Graham—not a mixture of low grade flour, sweeping and bran, but a genuine whole wheat graham—try it and be convinced —put up in 5, 10 and 25 lb, sacks.

Henkel's Pure Rye Flour—a fine high grade family rye flour—pure and wholesome—none hetter made Henkel's Pure Rye Meal-made from choice, clean rye, ground into a fine floury meal-makes elegant brown bread-put up in 5, 10, and 25 lb, sacks.

Henkel's Pure Buckwheat Flour—en extra quality, made only from "silver hull" buckwheat and ground by full roller process—always on hand during the season—put up in 10, 25 and 50 th, sacks.

Henkel's Fine Granulated Corn Meal—its rich, golden yellow color and fine granulation testify to its purity—put up in 5, 10, 25 and so lb sacks.

Henkel's Flour and Meal is warranted to be the BEST that can be made and is unqualifiedly guaranteed to the consumer. If not perfectly satisfactory return it, and your money will be refunded.

BE SURE THAT THE NAME OF "HENKEL" IS ON EACH AND EVERY PACKAGE.

MADE BY THE

COMMERCIAL MILLING CO.

Corner Randolph and Woodbridge Streets,

DETROIT MICH.