Germicide

INFORMATION

REGARDING THE

GERMICIDE

AND ITS

PROTECTIVE INFLUENCE.

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THE "GERMICIDE" SYSTEM

IS FULLY INDORSED BY

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Pennsylvania Germicide Co.

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PHILADELPHIA.

Many will suggest an improved system of sewerage as the great desideratum; others will admit the necessity, but supplement certain requirements in plumbing devices; another adds to these certain theories about ventilation; and yet we find, in spite of all these precautions, the evil still appears, and the various zymotic diseases, the outcome of sewer gases, continue to swell the mortuary lists of all our large cities.

In the *Popular Science Monthly* of November, 1882, an article appeared, contributed by Professor Frank H. Hamilton, of New York, in which some twenty pages are devoted to the subject of sewer gas. Carefully perused, it must influence the minds of those who hitherto have been only partially informed, or a good deal skeptical as to much that has been said and written regarding the dangers that cluster around our modern conveniences.

Reviewing the opinions and theories of the most celebrated sanitarians, sanitary engineers, physicians, and others who are deemed authorities upon the subject, giving due consideration to all the latest and most approved methods of protection by mechanical means alone, his researches and experience force the conclusion that certain immunity from the baneful effects of this dangerous element can only be secured by either removing entirely from our living-rooms all connections with the drainage system of the house or by counteracting and destroying this evil influence through the use of proper chemicals. The opinions expressed have been freely indorsed by Professor R. Ogden Doremus, Professor Willard Parker, Professor Jos. G. Richardson, Dr. James R. Nichols, Dr. Wm. Hunt, S. P. Sharples, Esq., several of the principal Boards of Health, and many other eminent men who have no specialty, pet scheme, or hobby to push to the front.

In view of the unsatisfactory results of the mechanical system, we find Colonel George E. Waring, perhaps the most celebrated of all our sanitary engineers, reported as having conditioned all mechanical contrivances with what is so seldom attained, *perfection*. That is, he thinks with simplicity and perfect construction, perfect material, perfect workmanship, perfect ventilation, and the utmost care and attention as to cleanliness, we may be safe. When we have reorganized human nature, this arrangement of *perfections* may be utilized, hardly before.

These contributions to the somewhat limited stock of literature upon this theme, embodies all that is essential, and thoroughly corroborates what has been previously set forth as well-established theories by the most eminent authorities in this and other countries.

The disease germ is the product of decomposition—the result of a

chemical change in the material wherein it originates. To successfully combat it and the gases in which it floats, "we must kneel at the shrine of chemistry," and employ such chemicals as will antagonize them, and decompose and destroy their power to do harm.

There is no safety or security in any other method.

The first practical attempt yet made in this country or Europe to publicly introduce chemical disinfection into houses by a systematized plan is by the "GERMICIDE." This is a small, neatly finished walnut case (see cuts and full explanation on cover), easily attached behind the lid of water-closets, which, without requiring any attention from the inmates of the house, supplies a constant flow of a solution of chloride of zinc (Burnett's fluid), through the closet and discharge pipes. This powerful agent is continually flowing, whether the closet is in use or not; it is acting upon the noxious gases which may arise from the sewer or other sources of contamination by pipe connections. The air of the room is also purified by a contrivance which gives off the vapor of thymol.

The "Germicide," being automatic in action, does not rely upon attention from the house inmates. It is examined and supplied with chemicals regularly once a month by uniformed inspectors.

By its use disinfection is effected in a continuous way; it furnishes the antidote to poisonous emanations which, notwithstanding *the most perfect plumbing and ventilation*, enter the house, causing diphtheria, malaria, and countless other diseases.

The appliance always remains the property of the Company. The nominal charge made for the monthly supply of chemicals places this needed sanitary apparatus within the reach of all.

Henceforward, the dreadful dangers growing out of our modern *conveniences* can be readily and cheaply averted, and the atmosphere of the most unwholesome adjuncts of our dwellings maintained perfectly pure, sweet, and healthful.

Persons desiring to investigate The "Germicide" System will be granted every facility and explanation at the office of the Company, or they will be called upon by competent representatives by sending notification of such desire to

C. L. COHN,

General Manager.

PHILADELPHIA, PA., June, 1884.

"Every one puts a lightning-rod on his house to guard against a danger that rarely occurs. A 'Germicide' protects you from dangers that are always present, and which attack you unheralded and unseen."

IMPORTANT STATEMENTS.

PROFESSOR TYNDALL says: "The disease germ is the product of decomposition, the result of a chemical change in the material wherein it originates."

PROFESSOR FRANK H. HAMILTON, of New York, in the *Popular Science Monthly* for November: "I. The offensiveness of odors is no test of their insalubrity, but the most fatal germs are conveyed in an atmosphere which is odorless. The absence of unpleasant odors therefore furnishes no proof that the air does not contain *sewer emanations*. II. He conclusively proves that plumbing devices do not effectually keep out sewer air, and agrees with Professor Doremus, who advises the constant and free application of disinfectants, of which it is unscientific to say they merely 'disguise bad odors;' for, if it be true that they do not cause directly the death of all germs, it is nevertheless true that they prevent putrefaction of organic matter, and thus destroy the aliment upon which germs subsist and by which they are made to multiply. III. What is sewer gas? What has been called sewer gas is composed of air, vapor, and gases in continually varying proportions, together with *living germs*, vegetable and animal, and minute particles of putrescent matter. IV. Sewer gas fertilizes the human soil, and renders it more capable of receiving and developing the germs of specific disease. V. Typhoid fever has long been known to be caused by sewer emanations."

PROFESSOR RICHARDSON, of the University of Pennsylvania: "I. According to the germ theory of disease, . . . diphtheria, typhoid fever, scarlet fever, and probably other contagious diseases, are connected with, if not solely due to, the development of spores or *germs* of vegetable organism in the human body. II. These *germs* propagate in sewers, and float to us on the sewer air, penetrating into our dwellings through water-closets, sinks, etc. . . . III. The true method of obviating this danger is by sterilizing with slow currents or drippings of solutions of sulphate of iron, corrosive sublimate, chloride of zinc, etc., the whole interior of our waste-pipes."

PROFESSOR BARKER to the New York Academy of Medicine: "Sewer-gas malaria had often been found to complicate scarlatina and render fatal an attack which might otherwise have ended in recovery."

ELLIOT C. CLARK, of Boston, the great sanitary authority, states that there is more danger from the soil pipes and trapping system of a house which become befouled with fœcal matter than from the sewer, and that chemical purification is the only remedy.

DR. ANGUS SMITH states that the proper method to adopt to protect our homes from foul gases impregnated with the germs of disease is to deal directly with the matter about to decompose and prevent decomposition by the use of a disinfectant.

DR. ELWYN WALLER, Chemist of the Metropolitan Board of Health of New York, and one of the highest authorities in this country on disinfectants and antiseptics, states that chloride of zinc is of great value. It not only prevents decomposition, but absorbs gases which arise from same.

PROFESSOR LIONEL L. BEALE, M. D., F. R. S., has said: "The only thoroughly efficient mode of disinfecting sewerage is by adding the disinfectant in each house, and so effecting the change before it becomes sewage."

T. PRIGDON TEALE, Leeds, *Sanitary Maxims*, third edition: "Whenever gas from sewers or the emanations from a leaky drain . . . make their way into a house, the inmates are in imminent danger of an outbreak of typhoid fever, diphtheria, or other febrile ailment classed together under the term 'zymotic,' not to speak of minor illness and depressed vitality, the connection of which with sewer gas is now fully established. Sewer gas enters a house most rapidly at night when outer doors and windows are shut, and is then, perhaps, most potent in contaminating the meat, the milk, and the drinking-water, and in poisoning the inmates."

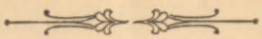
"THE POPULAR SCIENCE NEWS AND BOSTON JOURNAL OF CHEMISTRY," edited by Dr. J. R. Nichols, of Haverhill, Mass.: "In only two ways can aid be secured in removing the dangers arising from any system of city sewerage: First, by *mechanical* devices which will allow the free outflow of liquid and solid waste and at the same time absolutely prevent the inflowing of the secondary products arising from vital and disorganizing chemical action; and, second, by the use of *chemical* agents. The vast number of traps, valves, automatic plugs, bent tubes, etc., used in houses have resulted from efforts among plumbers and inventors to meet the difficulties of the situation by the first method.

"It may be said that some degree of success has crowned the efforts of mechanicians to obviate sewage perils; but the success has been by no means what the gravity of the situation demands. At present there does not appear to be a single mechanical appliance known which effectually under all circumstances affords immunity from the return of deleterious gases and disease germs into dwellings.

"The working out of the problem in mechanical directions affords no promise of success and may as well be abandoned. We must turn to the chemist for aid, and all the resources of his art must be brought into requisition to meet the emergency. That chemists have not been indifferent in providing agents for thorough disinfection is shown by the long list of important antiseptic substances which have recently been brought to notice. . . .

"Recently our attention has been called to a new device, which is very simple, and yet it meets fully all requirements. It is called a GERMICIDE, or germ-destroyer, and is designed to be applied to water-closets, so that by its use a constant flow of zinc solution is maintained and perfect disinfection is secured. . . . It is worthy the attention of all householders whose dwellings are connected with city or town drains."

PROFESSOR VARONA calls house drains "a small system of sewers within the dwelling," and adds: "The invisible portions are as much out of mind as they are out of sight."



"Disinfection is the application to or contact with noxious material of such chemical agents as will produce its decomposition and restore it into harmless forms."

"Phases of Sanitary Science."

One of the complaints urged against sanitary engineers by practical plumbers is that they cannot agree upon fundamental principles and are altering their requirements from year to year. . . . A house that is built in accordance with the approved specifications of the most competent engineers will be condemned within five years by the same authorities as faulty in its sanitary appliances. . . . Mr. George E. Waring, Jr., in the current number of the *American Architect*, says that "flushing" is the watchword of the best sanitary science of the present time, and confesses that he has little faith in the universal specific of trap ventilation and kindred appliances. Now, the separation of the drain-pipe, with its volume of air and gases, by means of water-seals and other devices, simple and complex, from the atmosphere of the house has been one of the chief aims of the sanitary engineer. A thousand and one traps and mechanical obstructions have been invented for this purpose, and at least a hundred of them have been pronounced absolutely safe by competent authorities. In every house erected under the new sanitary codes . . . the main drainage-pipes are required to be trapped, and the cost of plumbing in this and in other respects has more than doubled during the last fifteen years.

Yet here is Mr. Waring, one of the leaders of sanitary science, blurting out his want of faith in these costly appliances. The system of ventilating-traps, he says, is attended with dangers equal to those which it is intended to remove, and mechanical traps are a makeshift also, which become seats of decomposition unless they are kept constantly under the eye and copiously flushed.

It is a singular fact that in spite of the thousand inventions in plumbers' appliances, . . . the best advice which one of the most accomplished engineers has to give to house-builders is to have as little work of this sort as possible.—*Editorial New York Daily Tribune, Sept. 20th*, 1883.

There need, however, be no despair—no such word as "impossible" in our search for safety. The resources of science and the ingenuity of man must be equal to the demands for complete protection. The true remedy is not likely to be found in mere mechanical means, however perfect (for there are points of danger which mechanism does not cover), but in a combination of good plumbing with such chemical agents as are certain to destroy or prevent the formation of disease germs, impure air, etc., which are beyond the reach of the plumber alone.

SCIENTIFIC VALUE OF THE DISINFECTANTS USED IN THE "GERMICIDE."

Chloride of Zinc.

The constant supply of a solution of chloride of zinc, flowing from the "GERMICIDE" into the water-closet trap, and thence through the drainage system to the sewer, impregnates the water of the trap with a chemical which destroys the life of germs, thus rendering them harmless.

BUCK'S "HYGIENE" (pp. 561-562) says: "The metallic salts stand first as disinfectants for liquids containing any matter of a dangerous character. They arrest putrefaction and destroy infectious matter. . . . The best disinfectants among them are the zinc and iron salts. They usually are to be obtained as sulphates or *Chlorides*. Of these the former are the most common, *while the latter are preferable*."

"UNITED STATES DISPENSATORY," Fourteenth Edition (p. 1316), says: "Burnett's disinfecting fluid, like the officinal solution, is an aqueous solution of *chloride of zinc*. It is so called after Sir William Burnett, who introduced it into use in 1840 as a powerful deodorizing and disinfecting agent in neutralizing noxious effluvia and in arresting animal and vegetable decomposition. . . . The concurrent testimony of a number of observers shows that it acts as an excellent disinfectant for ships, hospitals, dissecting-rooms, water-closets, privies, etc."

"CYCL. OF CHEMISTRY" (Vol. I, p. 617) says: "*Chloride of zinc* and the other metallic chlorides absorb ammonia and sulphuretted hydrogen, and are useful as disinfectants of fœcal matter. . . . *Chloride of zinc*, in the proportion of one part to 300 of water, destroys infusorial life; diluted to but one part in 1,000 of inorganic liquid, it will check decomposition for a considerable time."

R. S. G. PATON, PH. D., Chemist of the Health Department, Chicago, Ill., says: "1. The first property of chloride of zinc as a disinfectant lies in its either directly *killing* the disease germ by coagulation, or indirectly by making its food indigestible. 2. Its second property is its action on such gases as ammonia, sulphuretted hydrogen, or ammonia sulphide, forming with these salts, which are not liable to be thrown into the atmosphere. 3. Its third property, changing these gases into solid substances. The vehicle (these gases) for carrying bioplasm (germs) into the air cannot be supplied."

PROFESSOR JOSEPH G. RICHARDSON, M. D., of the University of Pennsylvania, etc., says that chloride of zinc is one of the best disinfectants known. (See his letter.)

PROFESSOR WILLIAM HUNT, M. D., Surgeon-in-Chief of the Pennsylvania Hospital, etc., has fully indorsed and recommends the use of chloride of zinc. (See his letter.)

H. A. MOTT, Jr., PH. D., E. M., says: "The disinfectant used is chloride of zinc, which is well known to be of great value. It forms with the albuminous principles extremely insoluble compounds, and at the same time absorbs the gases which arise from same."

Its use is recommended by **Dr. Elwyn Waller,** Chemist of the Metropolitan Board of Health of New York, and one of the highest authorities in this country on disinfectants and antiseptics.

S. P. SHARPLES, Esq., Chemist and State Assayer for Massachusetts, fully approves of these chemicals. (See his letter.)

JAMES R. NICHOLS, M. D., editor and proprietor of the *Popular Science News* and Boston *Journal of Chemistry*, says: "No one competent to form an opinion of the comparative value of agents used as disinfectants can doubt the superior efficiency of the salt of zinc used in the GERMICIDE, or the value of thymol as an aërial agent used in connection with the zinc chloride." (See his letter.)

THOMAS C. MINOR, M. D., ex-Commissioner of Health, Cincinnati O., says: "The chemical agents used in the workings of the GERMICIDE are now universally held to be the best and most powerful antiseptics." (See his letter.)

E. W. LAMBERT, M. D., Medical Examiner Equitable Life Insurance Co., etc., says: "The antiseptic effect of zinc and thymol upon decomposing animal and vegetable substances is well known and generally recognized." (See his letter.)

J. H. RAUCH, M. D., President of the Illinois State Board of Health, recommends the use of chloride of zinc and thymol as disinfectants.

PROFESSOR R. OGDEN DOREMUS, Professor of Chemistry and Toxicology in Bellevue Hospital Medical College, Professor of Chemistry and Physics in College of the City of New York, Chemist of the Medico-Legal Society, most fully indorses the use of these chemicals as applied by the "GERMICIDE." (See his letter.)

THE CHICAGO BOARD OF HEALTH,
THE CINCINNATI BOARD OF HEALTH,
THE BOSTON BOARD OF HEALTH,
THE WASHINGTON BOARD OF HEALTH,
THE BALTIMORE BOARD OF HEALTH,
THE SAN FRANCISCO BOARD OF HEALTH,
} See their testimonial letters.

And thousands of other authorities advocate and indorse the proper application of **CHLORIDE OF ZINC.**

THE "GERMICIDE" SYSTEM will not be introduced in any dwellings where the plumbing is found to be in a defective condition.

Thymol.

The offensive gases which sometimes exist are neutralized by thymol, which constantly issues from the GERMICIDE.

"THE DISPENSATORY OF THE UNITED STATES," Fifteenth Edition (pp. 1433–4) says: "*Thymol.*—This substance, which is officinal for the first time, has recently attracted considerable attention from its possession of antiseptic properties analogous to those of carbolic and salicylic acids and creosote, with which it is also analogous in composition. . . . The disagreeable odor of carbolic acid induced M. Bouilhon, a French pharmaceutist, to search among the analogous chemical products in the hope of finding one which might have the important practical properties of carbolic acid without its disagreeable smell. Such a substance he found in thymol."

PROFESSOR S. BUCHHOLZ (Germany): Experiments to determine the various amount of antiseptics which would check the putrefaction of a liquid of a known composition. Smallest amount which prevented the development of bacteria:

	One part in		One part in
Corrosive sublimate, . . .	20,000	Methyl salicylic acid, . . .	1,000
THYMOL, ...	2,000	Salicylic acid, ...	666
Sodium benzoate, ...	2,000	Eucalyptol, ...	666
Creosote, ...	2,000	Sodium salicylate, ...	250
Benzoic acid, ...	1,000	CARBOLIC ACID, ...	200

—"*Encycl. of Chemistry*," *Vol. I, p.* 615.

PROFESSORS VOLKMAN AND RANKE (Munich): "*Thymol* does not exert any irritant action on the respiratory organs" (like all other disinfectants, as chlorine, sulphurous acid, carbolic acid, iodine, bromine, etc.—Ed.)—*Professors Volkman and Ranke.*

PROFESSOR RANKE (of Halle): "From an experience of forty-one wounds dressed with *thymol*, the lecturer [Dr. Ranke, of Halle] concluded that the method leaves nothing to be considered as to its antiseptic effect, and that it answers better than the carbolic-acid dressing. Further, it has no poisonous properties."—*Medical Press and Circular, August* 28, 1879.

PROFESSOR C. SYMES: "*Thymol.*—Dr. C. Symes has made a few experiments upon thymol which are of interest, as this substance continues to be largely used."—*Braithwaite's Retrospect for January,* 1880, *p.* 229.

"The powerful antiseptic action of *thymol*, exceeding under some conditions that of carbolic acid, its small activity as a poison, about one-tenth of that of carbolic acid, and the absence of irritating effect when it is applied to the skin, all point to its use as a substitute for carbolic acid in the now well-known antiseptic treatment of surgical cases elaborated by Professor Lister."—*Id.*

"The present cost of *thymol* is about five times the cost of the best carbolic acid; but as *one part* of the former seems to do as much work as twenty-five parts of the latter, the advantage of the price is on the side of thymol."—*Id.*

PROFESSOR H. A. MOTT, Jr., PH. D., E. M., says: "The vapor of thymol is more powerful than carbolic acid, is very pleasant and agreeable, and does not exert any irritant action on the respiratory organs."

R. S. G. PATON, PH. D., etc., says: "Thymol is well known to be an exceedingly powerful aërial antiseptic, and has not the objections of carbolic acid, namely, its strong odor and acid properties."

Etc., Etc., Etc.

The following Companies, duly incorporated under the Laws of their respective States, are actively engaged in the introduction of THE "GERMICIDE" SYSTEM.

The Germicide Co. of New York,	Capital,	$300,000, New York.
The New England Germicide Co.,	Capital,	300,000, Boston.
The Germicide Co. of Illinois,	Capital,	150,000, Chicago.
The Ohio Germicide Co.,	Capital,	100,000, Cincinnati.
The Germicide Co. of Baltimore,	Capital,	50,000, Baltimore.
The National Germicide Co.,	Capital,	50,000, Washington, D. C.

Negotiations are now in progress for the formation of similar Companies in several other States.

The "Germicide."

In view of its design, necessity, and wonderful success, it may be questioned whether any other modern invention can present equal claims to the public confidence.

In the extended list of those using the Germicide in New York City, Chicago, Boston, Baltimore, Washington, Brooklyn, and Cincinnati, the names of the following well-known physicians and scientists appear:

Allen, H. N., M. D., 34 Hanover Pl., Brooklyn.

Anderson, Joseph, M. D., 502 W. 57th, New York.

Armstrong, C. L., M. D., Cincinnati, O.

Atkinson, J. E., M. D., Baltimore.
Of the Faculty of University Hospital, etc.

Bailey, M. L., M. D., 382 Court, Brooklyn.

Bangs, L. Bolton, M. D., 127 E. 34th, New York.
Visiting Physician, Charity Hospital.

Barker, A. B., M. D., Cincinnati, O.

Bartley, E. H., M. D., 386 Pacific, Brooklyn.

Baruch, Simon, M. D., 158 W. 54th, New York.

Bates, Erskine S., M. D., 161 E. 31st, New York.

Billings, J. H., M. D, 399 Lexington Ave., New York.

Birdsall, A. H., M. D., 32 Madison, Brooklyn.

Bossert, Chas., M. D., 345 E. 120th, N. Y.

Bramble, D. D., M. D., Cincinnati, O
Health Officer, and Professor of Surgery, Cincinnati Medical College

Bridge, S. W., M. D., 199 Clinton, Brooklyn.

Bronson, Chas. C., M. D., Cincinnati, O.

Buck, R. H., M. D., 108 E. 27th, N. Y.

Bunker, Edward Samuel, M. D., 280 Henry, Brooklyn.
Surgeon Saint Mary's Hospital, Visiting Physician, Long Island College Hospital. Professor of the Principles and Practice of Obstetrics and Clinical Obstetrics, Long Island Hospital College. Consulting Physician, Sheltering Arms.

Burdick, S. P., M. D., 37 W. 42d, N. Y.

Burian, J., M. D., 207 E. 10th, N. Y.

Burt, Chas., M. D., 32 E. 28th, N. Y.

Byford, W. H., M. D., 1832 Indiana Ave., Chicago.

Carr, John, M. D., 73 W. 126th, N. Y.

Carr, William, M. D., 35 W. 46th, N. Y.

Carrick, A. L., M. D., 154 Broadway, Cincinnati, O.

Cassart, A. B., M. D., 1421 Lexington Ave., N. Y.

Casson, William, M. D., Cincinnati, O.

Chalmers, M., M. D., 56 W. 22d, N. Y.

Chapman, A. N., M. D, Atlantic and Clinton, Brooklyn.

Clark, Joseph E., M. D., 340 Clinton, Brooklyn.
Attending Physician, Saint Peter's Hospital.

Clark, John Seymour, M. D., 56th and Broadway, N. Y.

Conti, J. L., M. D., Cincinnati, O.

Cook, Henry, M. D., 15 Charlton, N. Y.

Cook, Wm. H., M. D., 131 W. 9th, Cincinnati, O.

Corkery, Oscar S., M. D., Baltimore.
Of the Faculty of College of Physicians and Surgeons, etc., etc.

Cundell, Juler H., M. D., M. R. C. S. L. S. A., Lond, etc., Cincinnati, O.

Curtis, Edward, M. D., Medical Examiner Equitable Life Association.
Professor of Materia Medica and Therapeutics, College Physicians and Surgeons, New York.

Curtis, Lester, M. D., 1925 Wabash Ave., Chicago.

Cypert, John R., M. D., 656 Lexington Ave., N. Y.

Davidson, D. M., M. D., 36 W. 47th, New York.

Dawson, W. W., M. D., Cincinnati, O.
Professor of Surgery, Ohio Medical College.

Delafield, Francis, M. D., 12 W. 32d, New York.
Professor of Pathology and Practice of Medicine, and Director of the Pathological Laboratory of the Alumni Association, College Physicians and Surgeons, New York. Visiting Physician, Bellevue Hospital. Attending Physician, Roosevelt Hospital.

Denman, D. M., M. D., 169 Broadway, Cincinnati, O.

Denman, L. M., M. D., Cincinnati, O.

DeWolf, Oscar C., M. D., Health Commissioner, Chicago.

Diossy, A. S., M. D, 209 W. 34th, N. Y.

Dixon, J. B., M. D., 23 W. 33d, N. Y

Doremus, Ogden R., M. D., LL.D., etc., Lexington Ave. and 23d, N. Y.
Professor of Chemistry and Toxicology in the New York Bellevue Hospital Medical College. Professor of Chemistry, College of the City of New York.

Dower, A. J., M. D., 380 Union, Brooklyn.

Duncan, D. S., M. D., 229 E. 82d, N. Y.

Dunton, Milo M., M. D., 37 E. 7th, N. Y.

Durgin, Samuel H., M. D., Boston.
Chairman Board of Health.

Faber, A., M. D., 362 Bowery, N. Y.

Fessenden, C. V. D, M. D., Bedloe's Island, N. Y.

Firth, Mrs. E., M. D., 410 Bedford Ave, Brooklyn.

Firth, L. B., M. D., 144 Prince, Brooklyn.

Flagg, R. N., M. D., Yonkers, N. Y.

Flint, Austin, M. D., 418 5th Ave., N. Y.
Professor of the Principles and Practice of Medicine and Clinical Medicine, Bellevue Hospital Medical College. Visiting Physician Bellevue Hospital, Consulting Physician, Charity Hospital, Rup. and Crip., Saint Mary's and Saint Elizabeth's Hospitals.

Flurie, T. W. P., M. D., 137 E. 28th, N. Y.

Forest, W. E., M. D., 1 Charlton, N. Y.

Foster, Frank P., M. D., *New York Medical Journal*, N. Y.

Foster, N., M. D., Cincinnati, O.

Franz, Henry, M. D., 513 3d Ave., N. Y.

Garrigues, Henry J., M. D., 137 W. 22d, New York,
Visiting Physician, Maternity Hospital.

Gilbert, J. B., M. D., 23 N. 27th, New York.

Gillette, Walter R., M. D., New York.
Visiting Physician, Charity, Maternity Saint Francis' Hospital, and N. Y. Lying-In Asylum. Medical Examiner, Mutual Life Insurance Company.

Gilmore, A. P., M. D., 288 Ontario, Chicago.

Goddard, A., M. D., 262 Dean, Brooklyn.

Gordon, S. J., M. D., 21 E. 10th, N. Y.

Gorton, D. A., M. D., 151 Clinton, Brooklyn.

Gray, John F., M. D., 68 Madison Ave., New York.
Lecturer on Diseases of the Nervous System and Medical Jurisprudence, Long Island College Hospital, and on the Anatomy and Physiology of the Nervous System.

Gray, R. B., M. D, 138 W. 23d, N. Y.

Grindle, J. W., M. D., 171 W. 12th, New York.

Guernsey, William, M. D., 59 W. 36th, New York.

Hartshorn, D. W., M. D., 124 W. 7th, Cincinnati, O.

Hartung, J., M. D., 300 E. 9th, N. Y.

Hayes, Justin, M. D., Chicago.

Helmuth, Wm. L, M. D., 299 Madison Ave., N. Y.

Herrick, Everett, M. D., 126 Madison Ave., N. Y.

Hills, Alfred R., M. D., 465 5th Ave., New York.

Hoexter, Jacob, M. D. 123 E. 65th, N. Y.

Holbrook, M. L., M. D., 13 Laight, N. Y.
Attending Surgeon, Brooklyn City Hospital. Consulting Surgeon to King's County.

Houghton, G. W., M. D., 135 Lafayette Ave., Brooklyn.

Houghton, Henry C., 12 N. 39th, N. Y.

Howe, Joseph W., M. D., 38 W. 24th, New York.
Professor of Surgery, University of the City of New York. Visiting Surgeon, Charity and Saint Francis' Hospitals.

Howells, M. M., M. D, Cincinnati, O.

Hull, Joseph J., M. D., 158 W. 34th, New York.
Attending Physician, Nursery and Child's Hospital.

Hunt, William, M. D, Philadelphia.
Surgeon, Pennsylvania Hospital, etc., etc.

Hunter, E. W., M. D., 1827 Wabash Ave., Chicago.

Irwin, B. J. Z, M. D., Surgeon U. S. A., 1909 Indiana Ave, Chicago.

Janvrin, Joseph E., M. D., 191 Madison Ave., N. Y.
Surgeon, Women's Hospital.

Johnson, Charles H., M. D., 141 Green Ave., Brooklyn.

Knapp, Herman N., M. D., 25 W. 24th, New York.
Surgeon, Opthal. and Aural Institute.

Knox, J. T., M. D., 82½ E. 3d, Cincinnati, O.

Lambert, E. W., M. D., 2 E. 37th, New York.
Medical Examiner, Equitable Life Insurance Co, etc.

Logan, W. M., M. D.,
454 Sycamore, Cincinnati, O.

Loryea, A. M., M. D.,
7 and 9 E. 46th, Electric Baths, 4 G. S.

Lowenthal, Herman, M. D.,
239 E. 30th, New York.

Ludlam, R., M. D.,
556 Wabash Ave., Chicago.

Lusk, William T., M. D.,
47 E. 34th, New York.
Professor of Obstetrics and Diseases of Women and Children and Clinical Midwifery, Bellevue Hospital Medical College. Visiting Physician, Bellevue and Maternity Hospitals

Maley, P. F., M. D., Cincinnati, O.

Mannheimer, M., M. D.,
1832 Indiana Ave., Chicago.

Marcy, E. E., M. D.,
396 5th Ave., New York.

Marsh, W., M. D., 268 Fulton, Brooklyn.

Mechael, J. Edwin, M. D., Baltimore.
Of the Faculty of University Hospital, etc.

McLaury, Wm. M., M. D.,
244 W. 42d, New York.

McLeod, S. B. Wylie, M. D.,
247 W. 23d, N. Y.

Michaelis, Moritz, M. D.,
204 E. 18th, N Y.

Minor, J. C., M. D., 10 E. 41st, N. Y.

Minor, Thos. C., M. D., Ex-Health Commissioner, Cincinnati, O.

Mitchell, J. S., M. D.,
2452 Michigan Ave., Chicago.

Moderman, C., M. D.,
502 3d Ave., New York.

Moloney, Augustus S., M. D.,
262 W. 42d, New York.

Morris, M. D., 67 E. 54th, New York.

Mott, Alexander B., M. D.,
62 Madison Ave., New York.
Professor of Clinical and Operative Surgery, Bellevue Hospital Medical College. Consulting Surgeon, Bellevue Hospital

Mott, H. A. Jr., Ph. D., E. M.,
30 W. 59th, New York.

Mount, M. A. B., M. D.,
574 Lexington Ave., New York.

Muscroft, C. S., Jr., M. D.,
100 W. 7th, Cincinnati, O.

Myrth, W., M. D.,
36 W. 32d, New York.

Nichols, James R., M. D.,
Haverhill, Mass.
Editor Boston *Journal of Chemistry*, etc., etc.

Oberndorfer, Isador P., M. D.,
959 Lexington Ave., New York.

O'Dell, F. M., M. D.,
7 W. 28th, New York.

Ogden, E. J., M. D.,
1656 Michigan Ave., Chicago.

Ogden, M. D., M. D.,
Palmer House, Chicago.

O'Reilly, C. C., M. D.,
170 6th Ave., New York.

Otis, Fessenden N., M. D.,
108 W. 34th, New York,
Professor of Venereal Diseases, College Physicians and Surgeons. Attending Physician, Charity Hospital. Consulting Surgeon, Saint Elizabeth's Hospital.

Palmer, William, M. D.,
258 Grand, New York.

Paton, R. S G., Ph. D., Chicago.
Chemist of Health Department, Chicago.

Pennoyer, James, M. D.,
162 Putnam Ave., Brooklyn.

Pilcher, Lewis S., M. D.,
4 Monroe, Brooklyn.
Lecturer on Materia Medica, and Adjunct Professor of Anatomy, Long Island College Hospital

Post, A. C., LL. D., M. D.,
291 Madison Ave., New York.
Professor (Emeritus) of Clinical Surgery, President of the Faculty, University of the City of New York. Visiting Surgeon, Presbyterian Hospital. Consulting Surgeon, New York, Saint Luke's, and Women's Hospital

Pratt, William H., M. D.,
94 Sixth Ave., New York.

Richardson, Joseph G., M. D.,
3238 Chestnut, Philadelphia.
Professor of Hygiene and Demonstrator of Histology in University of Pennsylvania. Also, of the Philadelphia Board of Health

Richardson, W. W., M. D.,
79 Washington Pl., Boston.

Ripley, John H., M. D.,
605 Lexington Ave., New York.
Consulting Surgeon, Ruptured and Crippled, and Saint Joseph's Hospitals. Visiting Surgeon, Charity Hospital. Visiting Physician, Saint Francis' Hospital

Rivenburgh, E. L., M. D., Cincinnati, O.

Rosenberg, A., M D.,
71 S. Clark, Chicago.

Ross, Jas. P. M, D.,
428 W. Washington, Chicago.
Professor, Rush Medical College, Chicago

Rynear, M., M. D., 41 W. 35th, N. Y.

Sachs, Julius, M. D., 121 W. 49th, N. Y.

Saeger, L. H., M. D, 140 E. 30th. N. Y.

Sands, Henry B., M. B., 35 W. 33d, N. Y.
Professor of the Practice of Surgery, College of Physicians and Surgeons, N. Y. Attending Surgeon Roosevelt Hospital Consulting Surgeon, St. Luke's Hospital.

Satterlee, F. Leroy, M. D,
21 W. 19th, New York.

Sayre, Louis Hall, M. D.,
140 E. 30th, New York.

Scarlet, ———, M D., Cincinnati, O.

Schley, J. M., M. D., 1 E. 42d, N. Y.

Schoonover, Warren, M. D,
682 Lexington Ave, New York.

Seeger, F., M, D.,
718 Lexington Ave., New York

Shaffer, Newton M, M. D.,
31 W. 36th, New York.
Surgeon in Charge, New York Orthop Dispensary and Hospital. Orthop Surgeon, St. Luke's Hospital

Shannon, W. J., M. D.,
112 Lafayette Ave., Brooklyn.

Shaw, H. B, M. D., 35 W. 125th, N. Y.

Shearer, Thomas, M. D., Baltimore.

Shephard, A. Warner, M. D,
126 Willoughby, Brooklyn.

Shephard, Charles, M. D.,
81 Columbia Heights, Brooklyn.

Shrady, G. F., M. D,
247 Lexington Ave., New York.
Visiting Surgeon, Presbyterian and St. Francis' Hospitals.

Sims, J. Marion, M. D.,
267 Madison Ave., New York.
Consulting Surgeon, Woman's Hospital.

Skein, Alexander J. C., M. D.,
167 Clinton, Brooklyn.
Professor of Medical and Surgical Diseases of Women and Diseases of Children, Long Island Hospital College. Visiting Physician, Long Island College Hospital.

Smith, D. E., M. D.,
131 Fort Green Place, Brooklyn

Smith, Hanbury, M. D.,
Broadway and 56th, New York.

Smith, A. P., M. D.,
Professor of the University of Maryland etc., Baltimore.

Snetzelschwab, Charles, M D,
Cincinnati, O.

Snively, Joseph C., M. D.,
157 Clinton, Brooklyn.

Stein, Alexander W., M. D.,
30 W. 15th, N. Y.
Visiting Surgeon, Charity Hospital

Strew, William W., M. D.,
213 E. 77th, New York.

Sturges, F. R, M. D,
16 W. 32d, New York.
Clinical Lecturer on Venereal Diseases, University of the City of New York. Visiting Surgeon, Charity Hospital.

Swift, Wm. J., M. D.,
40 E 30th, New York.

Tauskey, M. D., 171 E. 70th, N. Y.

Taylor, C. O., M. D.,
1419 Lexington Ave., N. Y.
Consulting Physician, Nursery and Children's Hospital, and Maternity Hospital.

Tetamore, Frank, M. D.,
454 Marcy, Brooklyn.

Thrasher, A. B., M. A., M. D.,
94 W. 7th, Cincinnati, Ohio.

Thurman, W., M. D.,
517 Madison Ave., N. Y.

Ticknor, M. A., M. D.,
580 Henry, Brooklyn.

Tooker, Robert N., M. D.,
245 Dearborn Ave., Chicago.

Townsend, Smith, M. D,
Health Officer, etc., etc., Washington, D C.

Trush, J., M. D.,
114 Broadway, Cincinnati, Ohio.
Professor of Diseases of Women and Children, Cincinnati College of Medicine

Van Bibber, W. C., M. D, Baltimore.

Van Musit, Henry, M. D.,
1266 Lexington Ave., N. Y.

Wanstall, Alfred, M. D., Baltimore.

Wayne, E. S., M D., Cincinnati, Ohio.
Board of Health, Analytical Chemist.

Weisse, Faneuil D, M. D.,
51 E. 22d, N. Y.
Professor of Practical and Surgical Anatomy, University of the City of New York. Visiting Surgeon, W. H. and A. H. Hospital

Welch, W. J., M. D., 211 Henry, N. Y.

West, F., M. D,
Resident Physician University Hospital, Baltimore.

West, Charles E., M. D., Boooklyn.

White, Whitman V., M. D.,
1311 Park Ave., N. Y.

White, W. H., M. D.,
11 E. 32d, N. Y.

Willey, George A., M. D.,
275 W. 11th, N. Y.

Williams, W. L., M. D.,
Cincinnati, Ohio.

Wilson, Lewis, M. D., Cincinnati, Ohio.
Superintendent Sanitary Dept. Cincinnati Board of Health.

Wood, James R., M. D., 62 W. 17th, N. Y.
Professor (Emeritus) of Surgery, Bellevue Hospital Medical College. Visiting Surgeon, Bellevue Hospital. Consulting Surgeon, Charity, Women's, Saint Vincent's, Ruptured and Crippled Hospital.

Woods, A. L., M. D.,
34 Clinton, Brooklyn.

Etc., Etc., Etc., Etc.

THE highest tribute which can be paid to any device, or system proposing to lessen causes of diseases and death, and the one most calculated to inspire confidence, is its adoption in the houses of medical practitioners of world-wide reputation, who are constantly recommending the "GERMICIDE" to their patients. Hundreds of valuable autograph acknowledgments and indorsements from physicians, scientists, and others using the "GERMICIDE" may be inspected at any time, together with other matters of importance appertaining to the subject, which cannot fail to prove of great concern to persons feeling an interest in the subject. It can be shown that a substantial enterprise is projected, and one that should enlist the sympathy and support of every man and woman who has a thought for the welfare of their household.

R. OGDEN DOREMUS, M. D., LL.D.,

Professor of Chemistry and Toxicology in Bellevue Hospital Medical College; Professor of Chemistry and Physics in College of the City of New York; Chemist of the Medico-Legal Society.

Not only from theory, but from my own knowledge, sewer gases are developed in our houses as well as received from the sewers; for warmth and moisture are known to facilitate the decomposition of impure materials, and as these conditions exist in our residences vile gases and disease-breeding germs must be produced.

But certain chemical substances, if present, will check the production of said gases and germs. . . . I know of but one device which accomplishes these important results, and where a constant flow of the chloride of zinc, dissolved in water, was made to pass through the water-traps and water-pipes; this was called the GERMICIDE. . . .

The poisonous agents which emanate from decomposing animal, vegetable and fœcal matter are not always recognizable by the sense of smell, as is daily and sadly demonstrated, and as I know and feel most keenly in the recent loss of a beloved member of my family. Yet science can grapple successfully with these invisible agents.

. . . I had the pleasure of discussing these themes with the members of the National Board of Health in Washington. I showed them your effective instrument, the GERMICIDE, with its incessant flow of a solution of chloride of zinc. . . . . .

Your GERMICIDE has unquestionably prevented sickness and death in many homes in New York, Chicago, and Cincinnati, where thousands of these instruments have been introduced, and I congratulate you that the medical profession, as well as the public, are giving you such hearty support. . . . . .

H. A. MOTT, JR., PH. D., E. M.,

Any means or device, then, which has for its object the destruction of these germs, or, better still, the prevention of such decomposition in matters which foster their growth and multiplication, should be met with great favor by all intelligent people. . . .

The proper method to adopt, then, to protect our homes from foul gases impregnated with germs of disease, is to deal directly with the matter about to decompose, and prevent decomposition by the use of a disinfectant; and this I find to be the principle of the GERMICIDE. . . .

It is with pleasure that I direct the attention of the public to the GERMICIDE, as being the most economical and effective means known to secure health in our homes.

OSCAR C. DE WOLF, M. D.,

Commissioner of Health of the City of Chicago.

. . . I have never given the indorsement of my name to a single one of the many methods and systems designed to accomplish this purpose, and which have been brought to my attention during the past four years. . . .

From the experiments detailed by Dr. Paton and Mr. Thomas (President of the State Microscopical Society), and many of which I witnessed, I must concur in their opinion that, as at present constructed and used, traps, however well supplied with water, can only act as a very temporary obstruction to the passage of disease germs into our homes from the sewers with which they are connected; and, again, that it is entirely practicable to render the water in these traps so perfectly aseptic as to destroy disease-bearing germs that come in contact with it. I commend the system . . . as practical, economical, and scientific, and believe that if it were generally introduced into the homes of our city it would protect each household so connected from many of the dangers of sewer gas, and would also render the air in our sewers aseptic and pure.

SAMUEL H. DURGIN, M. D.,

Chairman BOSTON BOARD OF HEALTH.

I have examined your apparatus called the GERMICIDE, and have witnessed its operation.

You seek by means of the GERMICIDE to complete the barrier by keeping the water seal so charged with the chloride of zinc, a well-known antiseptic, as to arrest and destroy those gases and germs which might otherwise pass through the trap and into the house. The principle is good and the experiments shown me were highly satisfactory.

I believe that if the apparatus should be brought into general use it would be the means of reducing the sick-rate from preventable causes.

I therefore believe it my duty to make an exception of this case, and to give your apparatus a hearty recommendation.

JOSEPH G. RICHARDSON, M. D.,

Professor of Hygiene and *Demonstrator of Histology* in the University of Pennsylvania, Philadelphia; also, of the PHILADELPHIA BOARD OF HEALTH.

Recently I have for the first time witnessed the operation of the GERMICIDE apparatus. . . .

The public benefits arising from a general adoption of this plan for *continuous antiseption* would be almost incalculable, and even for individual patrons it affords, I think, when aided by first-rate plumbing, an absolute security against those dangers from sewer gas which, according to Professor F. H. Hamilton in the *Popular Science Monthly* for November, 1882, are so great and so imminent that it is advisable for us all immediately to go back in our civilization and abandon those modern conveniences of water-closets, bath-tubs and stationary wash-stands, which do so much at the present day to render life worth living.

SMITH TOWNSEND, M. D.,

Health Officer, District of Columbia, Washington, D. C.

The GERMICIDE is designed to act as a purifying agent in houses by the application of chloride of zinc to the water seal in sewer traps. This object seems to be accomplished by the mechanism of the device, and I have no hesitation in commending its use.

JAMES A. STEWART, M. D.,

Of the Health Department, Baltimore, says

I have carefully observed the operation of the GERMICIDE in the water-closets connected with the offices of the Police Department in the City Hall, and am free to say that I am both surprised and pleased with the complete success at this place. . . . I shall recommend the introduction of the GERMICIDE to every one.

EXTRACT FROM REPORT OF THOMAS C. MINOR, M. D.,

Ex-Commissioner of Health, Cincinnati, Ohio.

I carefully investigated the workings of the new antiseptic apparatus known as the GERMICIDE. I have long been satisfied from personal observation and practical experience that none of the mere mechanical contrivances known as water traps, applied to soil pipes, will prevent the ingress of sewer gas into house interiors. . . .

The value of this invention can hardly be overestimated, viewed from a purely sanitary standpoint, and I confidently predict a largely decreased death-rate from zymotic diseases in those cities so fortunate as to secure the full benefit of its application. . . .

During an official career dating back to 1873, I have never before indorsed any of the numerous inventions submitted for inspection, but cheerfully make this an exception to the general rule.

CINCINNATI BOARD OF HEALTH.

Having thoroughly examined into the working of the "Germicide," and having tested it fully, we have no hesitation whatever in recommending it to all those who desire to prevent the escape of sewer-gas into their dwellings. It has been one of the objects of the Board of Health, ever since its establishment, in 1865, to discover some apparatus which would prevent the escape of poisonous gases through the traps of water-closets, into the dwelling houses of our citizens.

The germ theory of disease has been clearly established in the public mind, and acknowledging this evil, it has been made a special object of the Board to find a remedy. Science and invention has sought to accomplish this end, by mechanical devices, in plumbing, ventilation, etc., but, as yet, with but partial success. To control this germ, it is necessary to destroy it, and that, it has been demonstrated, can only be done by the use of chemical substances. This has been accomplished by the constant flow of a solution of Chloride of Zinc, as is done in the "Germicide," and whatever may escape the action of the Zinc is antagonized by the Thymol vapor discharged at the same time.

CHAS. F. KLAYER, President Board of Health.
FERDINAND SPRINGMEIER,
L. R. BRAMBLE, M. D.,
Members of Board.

W. A. DOUGLASS, M. D., *of the San Francisco Board of Health, says:*

. . . This is to certify that in my opinion its method of distributing chloride of zinc in the trap is the *only* way to destroy completely the germs of sewer gas. . . . I am entirely satisfied with the result of its working, and would therefore recommend it to general use.

S. P. SHARPLES, ESQ., *Chemist and State Assayer for Massachusetts, says:*

I have had the "Germicide" in use at my office for some weeks. It has worked well. I think that besides furnishing a constant supply of a disinfectant, this apparatus supplies another very important need, that is, it keeps the traps in the pipe always full, and with a fluid that is death to all germs. Even the badly constructed traps that are siphoned off by a sudden flush of water will be kept filled by this apparatus. I have also had occasion to test the strength of the outflowing liquid at the time the apparatus was first applied, and after it had been in operation a month without renewal of the chemicals, and find that it is remarkably constant. I regard the invention as an excellent one and would recommend its use.

DR. JAMES R. NICHOLS, *of Haverhill, Mass., Editor and Proprietor of the "Popular Science News" and "Boston Journal of Chemistry:"*

I have very carefully examined this device, and have seen it in practical use for several weeks, and it is my opinion that it fully meets a sanitary need of the highest importance. The desirable end reached has not been hitherto attained, viz.: a method of slowly and constantly supplying to the bowl of water-closets a solution of chloride of zinc in sufficient quantity to sterilize any infective germs which may find their way through water-closets into rooms in dwellings. No one competent to form an opinion of the comparative value of agents used as disinfectants can doubt the superior efficiency of the salt of zinc used in the "Germicide," or the value of thymol as an aerial agent used in connection with the zinc chloride. The important points attained in this device seem to me to be the employment of the zinc salt in amorphous form, so prepared that by the constant action of water it slowly dissolves, conveying to the pan of the closet enough of the salt to act effectively night and day without interruption. This constant action must prevent the ingress of living germs, not only into the water-pipes of dwellings, but, if the device is generally adopted, must aid in sterilizing the contents of the smaller, or even larger, sewers of cities.

L. BOLTON BANGS, M. D., *Visiting Physician, Charity Hospital, N. Y., says:*

I am satisfied with the "Germicide," and desire it to be kept permanently in my home.

JOSEPH J. BURIAN, M. D., *New York, says:*

The "Germicide" has given me great satisfaction. It ought to be adopted in all houses as a safeguard against infection.

CHARLES C. BRONSON, M. D., *Cincinnati, says:*

I have had a fair test of the "Germicide" and find its disinfecting operation perfectly satisfactory.

A. B. BARKER, M. D., *Cincinnati, says:*

I consider the "Germicide" a great invention and would recommend it for health, comfort, and otherwise.

WM. H. COOK, M. D., *Cincinnati, says:*

I have watched, with some care, the "Germicide," and take pleasure in saying that it does effectively the work of disinfection expected from it.

MRS. DR. CURTIS, *Chicago, says:*

Am pleased beyond measure with its value as a neutralizing agent.

A. L. CARRICK, M. D., *Cincinnati, says:*

I have tested them and find them entirely satisfactory.

OSCAR S. CORKERY, M. D., *of the Faculty of the College of Physicians and Surgeons, etc., etc., Baltimore, says:*

I believe that it has a future of great usefulness.

L. M. DENMAN, M. D., *Cincinnati, says.*

I take pleasure in testifying to its efficiency, and recommend its general adoption.

D. M. DENMAN, M. D., *Cincinnati, says:*

I think it one of the greatest inventions of the age. No house should be without one.

D. W. HARTSHORNE, M. D., *Cincinnati, says:*

I find that it accomplished just what is claimed for it, and most cordially recommend it as essential to health and comfort.

JUSTICE HAYES, M. D., *Chicago, says:*

It is peculiarly valuable in preventing traps from being siphoned.

WILLIAM HUNT, M. D., *Surgeon Pennsylvania Hospital, etc., etc., Philadelphia, says:*

The "Germicide" is a decided success. I say this from observation and experience. With many others, I have for a long time thought that the true idea of the purification of dwellings from noxious matters is a chemical one. Some method was wanting by which a reliable disinfectant in solution could be made to constantly percolate through the discharge-water system of a house. By this means poisonous matters, whether gases or germs, are altered or destroyed in a thorough manner, which is vastly superior to any mechanical methods I know of, to trap them out. The essential operation of the "Germicide" is to destroy or change so as to correct harming matter into harmless substance. That it does so, I have had practical proof. This idea is deserving of the approval of all sanitarians and scientific men. That it will meet the approval of all who try it, whether scientific or not, I have no doubt. I see in it the most effectual way that has yet been presented for keeping disease-breeding material out of human habitations.

B. J. Z IRWIN, M. D, *Surgeon and Brevet-Colonel, U. S A., says:*

For more than a year I have had the apparatus in use, and every additional day's use convinces me of its superior excellence as a preventive of zymotic diseases by its power of chemically destroying the germs thereof.

H. CUNDELL-JULES, M. D., M. R. C. S., L. S. A., L. M. Lond., etc., *Cincinnati, says:*

Its presence soon demonstrates its use. It is an indispensable adjunct.

JAS. C. LAY, M. D., *New York, says:*

It gives me pleasure to speak in high commendation of the working of the "Germicide" as well as the beneficial influence it has in correcting foul air and dispelling miasmatic effluvia.

WM. T. LUSK, M. D., *Professor of Obstretrics and Diseases of Women and Children and Clinical Midwifery, Bellevue Hospital Medical College, Visiting Physician, Bellevue and Maternity Hospitals, says:*

I regard it as a valuable invention.

MORITZ MICHAELIS, M. D., *New York, says:*

It has given complete satisfaction and has entirely come up to my expectations in regard to its efficacy.

E. E. MARCY, M. D., *New York, says:*

I find that it accomplishes all that is claimed for it. I have recommended it to many and in all instances it has given great satisfaction.

DR. MITCHELL, *Chicago, says:*

Since using it have not been troubled with the dangerous emanations.

DR. MILLER, *Chicago, says:*

That, since using the "Germicide" he does not have the slightest indications of sewer gas.

E. J. OGDEN, M. D., *Chicago, says:*

It has certainly destroyed disagreeable odors and is a valuable deodorizer and disinfectant.

J. B. ROSS, M. D., *of Rush Medical College, Chicago, says*

From experience that it is a most excellent disinfectant

F. R. STURGES, M. D., *Clinical Lecturer on Venereal Diseases, University of the City of New York, Visiting Surgeon Charity Hospital, New York, says:*

I am much pleased with my experience of the "Germicide." It has more than answered my expectations.

F. LEROY SATTERLEE, M D., *New York, says:*

I am convinced that it is a very valuable invention. I would not part with it for many times its cost.

THOMAS SHEARER, M. D., *Baltimore, says:*

Am convinced that its general introduction will go very far to solve the difficult sanitary problem—How to prevent the generation of sewer gas. The principle is correct—its construction simple and the result eminently satisfactory.

A. P. SMITH, M. D., *Professor in the Maryland University, etc., etc., says:*

I have been using one of your "Germicides" and am much pleased with its action. I think that the instrument carries out practically all that it promises theoretically.

R. N. TOOKER, M. D., *Chicago, says*

He considers it a luxury as well as a necessity, and would not be without it at any price.

W. C. VAN BIBBEE, M. D., *Baltimore, says:*

The "Germicide" has been in active operation in my house. I have examined the principles which govern their use and the materials used in their management, and believe they answer the purpose for which they are intended.

W. J. WELCH, M. D., *New York says:*

I have had under observation your "Germicide" and have found it a pleasant and effective disinfector I look upon it as a sanitary acquisition and would recommend its introduction into all dwellings.

A. G. WINKLE, M. D, *New York, says:*

I cannot express myself other than satisfied., I consider it quite a household necessity.

CHARLES E. WEST, M. D., *Brooklyn, says:*

I can say it is, I believe, doing its work satisfactorily. We like it.

FANUEL D. WEISSE, M. D., *Professor of Practical and Surgical Anatomy, University of the City of New York, Visiting Surgeon W. H and A. H Hospital, says:*

The "Germicide" has fulfilled, in my house, all that is claimed for it, and I continually recommend its introduction into the households of my patients as essential to the proper sanitary condition of their city homes.

ALFRED WANSTALL, M. D., *Baltimore, says:*

I have carefully watched the effect of the "Germicide" placed under my observation, and pronounce it a success. This little device furnishing a constant and sufficient supply of a reliable disinfectant, cannot be too highly commended.

PUBLIC AND CHARITABLE INSTITUTIONS.

Homœopathic Hospital,	New York.
Jewish "	Cincinnati.
Mount Sinai "	New York.
New York "	"
Ninety-ninth Street Hospital,	"
Nursery and Child's "	"
Orthopædic "	"
St. Elizabeth's "	"
St. Francis' "	"
St. Joseph's "	"
St. Peter's "	"
St. Vincent's "	"
Women's Hospital & Dispensary,	"
University Hospital,	Baltimore.
Charity Hospital (Blackwell's Island),	New York.
Cincinnati Hospital,	Cincinnati.
County Infirmary,	"
Good Samaritan Hospital,	"
Hahnemann "	"
Baltimore Eye and Ear Institute,	Baltimore.
City Hospital,	"
Nursery and Home,	New York.
Department of Charities and Correction,	New York.
Board of Charities and Correction,	Brooklyn.
Brooklyn Post-office,	Brooklyn.
Home of the Friendless,	Brooklyn.
" for Female Help,	"
Convent of Mercy,	New York.
Ladies' Deborah Nursery,	"
Nursery and Home,	Yonkers, N. Y.
Sisters of Charity,	New York.
St Stephen's Home,	"
St. Joseph's "	"
Erring Women's Home,	Chicago, Ill.
Children's Aid Society,	New York.
Society for Protection of Friendless Women and Children,	New York.
St. Vincent de Paul Society,	"
New York Christian Home for Intemperate Men,	New York.
Board of Foreign Missions,	"
Protestant Orphan Asylum,	Chicago, Ill.
St. Vincent de Paul "	New York.
Mt. St. Vincent Convent,	"
St. Catherine's Hall,	"
Academy of St. Peter's Church,	"
St. Francis' College,	"
Industrial School for Girls,	Chicago, Ill.
Trinity Church Corporation,	New York.

UNIVERSITY HOSPITAL, *Baltimore:*

This is to certify that the "Germicide" is in use at this Hospital. The principle is good in every particular, and fills a want long felt by those who have the care of the sanitary arrangements in large institutions or elsewhere.

F. WEST, M. D.,
Resident Physician.

(Signed) J. EDWIN MICHAEL, M. D.,
J. E. ATKINSON,
Of the Faculty.

BALTIMORE EYE AND EAR INSTITUTE:

There can be no doubt of the disinfecting properties of Chloride of Zinc, especially in the concentrated form in which the "Germicide" furnishes it to closets. If the officers of the Company will do their share in a proper supervision as to insure the successful working of the "Germicide," its introduction into our houses will be a positive good. J. J. CHISHOLM, M. D.

CHARITY HOSPITAL, *Blackwell's Island, New York:*

To Hon. Townsend Cox, *President, etc.:*

The members of the Advisory Committee of Charity Hospital have personal knowledge of the "Germicide," and believe it to be a *powerful* and *efficient deodorizer* and *disinfectant*. It is very extensively in use, and no doubt its application to the privies and closets of the Hospital would be of value to the institution.

WALTER R. GILLETTE, M. D.,
W. T. WHITE, M. D.,
JOSEPH W. HOWE,
Advisory Committee.

The "Germicides" continue to give satisfaction. JOHN SMITH,
Clerk.

INSTITUTION OF MERCY, *New York:*

We are pleased to state that the "Germicide" gives great satisfaction. We wish you success in your endeavors to make the public realize the necessary usefulness of the "Germicide," and freely and gratefully testify to its merits and efficiency. THE SISTERS OF MERCY,
S. M. ALPHONSUS, *Treasurer.*

CITY HOSPITAL, *Baltimore:*

After a rather protracted trial of "Germicide" at the City Hospital and under unfavorable circumstances, the odor of the building has been entirely corrected, and I believe that it has a future of great usefulness.

OSCAR S. CORKERY, M. D.

NEW YORK OPHTHALMIC AND AURAL INSTITUTE, *New York:*

I take pleasure in stating that your apparatus has given satisfaction, both in my house and the New York Ophthalmic and Aural Institute, a hospital to which I am one of the medical officers. HERRMAN KNAPP, M. D.

ST. VINCENT HOSPITAL, *New York:*

We beg leave to state that we find it of great utility as a disinfecting agent.

SISTERS OF CHARITY.

MOUNT SINAI HOSPITAL, *New York:*

I am instructed by the Executive Committee to state that you may add the name of the Institution to the list of your indorsers, the "Germicide" having proved itself very valuable to enhance the sanitary condition of the Hospital.

JOSEPH L. SCHERER,
Assistant Secretary.

HOTELS.

Atlantic Hotel,	New York.	Tremont Hotel,	New York.
Albany, The,	"	Wellington Hotel,	"
Albemarle House,	"	Westminster Hotel,	"
Branting, The,	"	Windsor "	"
Brevoort House,	"	Anna House,	Chicago.
Brighton, The,	"	Atlantic Hotel,	"
Broadway Hotel,	"	Benton House,	"
Burlington, The,	"	Brevoort House,	"
Continental Hotel,	"	Briggs House,	"
Cosmopolitan Hotel,	"	Choate's Hotel,	"
Cumberland Flats,	"	City Hotel,	"
Delmonico's,	"	Clarendon House,	"
Devonshire, The,	"	Commercial Hotel,	"
East End Hotel,	"	Continental Hotel,	"
Frankenstein's Hotel,	"	Crawford House,	"
Glenham Hotel,	"	Douglas House,	"
Grand Central Hotel,	"	Fisk House,	"
Hotel Royal,	"	Grand Pacific,	"
Lennox House,	"	Garfield House,	"
Libby's Hotel,	"	Hotel Royale,	"
Long Island Hotel,	"	Leland's Hotel,	"
Lynch's Hotel,	"	Mariners' Hotel,	"
Mansion House,	Brooklyn.	Moulton House,	"
Maxwell Flats,	New York.	Merchants' Hotel,	"
Merchants' Hotel,	"	Miehl's Hotel,	"
Newport House,	"	Palmer House,	"
New York Hotel,	"	Parker House,	"
Pierpont House,	Brooklyn.	Randolph House,	"
Rossmore Hotel,	New York.	Rives House,	"
Snug "	"	Transit House,	"
St. Denis "	"	Union Stock-Yards Hotel,	"
St. James "	"	Washington Hotel,	"
St. Nicholas Hotel,	"	Waukegan House,	"
St. Omer,	"	CONTINENTAL HOTEL,	PHILADELPHIA,
Sinclair House,	"	Etc., Etc.	

ALBEMARLE HOTEL, *New York:*

We can cheerfully recommend your "Germicide," having had them in use in this hotel several months and they have given great satisfaction.

BROWER HOUSE, *New York:*

Would not be without them.

BREVOORT HOUSE, *New York:*

There seems to be no reason to change the recommendation made a year or so since.

BRIGGS HOUSE, *Chicago:*

I cheerfully bear testimony to the efficiency and would not be without it under any circumstances.

CONTINENTAL HOTEL, *Philadelphia:*

We have thoroughly tested the system and therefore do not hesitate to confidently recommend its adoption, believing that if the appliances are properly cared for that much good can be accomplished.

GLENHAM HOTEL, *New York:*

The machine which you put in for me has so far given entire satisfaction. You will please put in nine more as soon as you can make it convenient.

LELAND HOTEL, *Chicago:*

The "Germicides" placed in the "Leland" water-closets have fully accomplished their purpose. We have no bad odors and can recommend them highly.

NEW YORK HOTEL, *New York:*

The "Germicides" are giving satisfaction.

STURTEVANT HOUSE, *New York:*

We are perfectly satisfied with the "Germicides."

THE CUMBERLAND FLATS, *New York:*

I have twenty-two in the "Cumberland." This is about the best evidence I can give of my entire satisfaction with their working.

ST. NICHOLAS HOTEL, *New York:*

Systematic disinfection as introduced by the "Germicide" Company, cannot but prove of great advantage. I cordially recommend the "Germicide" to my friends.

MISCELLANEOUS.

Daly's Theatre,	New York.	Novelty Theatre,	New York.
Haverly's Brooklyn Theatre,	Brooklyn.	Wallack's "	"
" 5th Ave. "	New York.	5th Ave. "	"
Madison Square "	"	Steinway Hall,	"
Metropolitan Alcazar, "	"		

HAVERLY'S BROOKLYN THEATRE.

The "Germicide" used in this theatre has given perfect satisfaction.

The Crescent Club,	New York.	The Union Club,	New York.
" "Lamb" "	"	" " League Club,	"
" Mercantile Club,	"	" University "	"
" Press "	"	" German Club	"

UNION CLUB, *New York:*

The "Germicide" has given every satisfaction, and I recommend it to be a very perfect disinfector.

WM. McMANUS, *Engineer.*

Chase National Bank,	New York.	Produce Bank,	New York.
Chatham " "	"	Six-Penny Savings Bank,	"
Citizens' " "	"	Commercial National Bank,	Chicago.
Exchange " "	"	Merchants' Loan & Trust Co.,	"
Garfield " "	"	National Bank of Illinois,	"
German Exchange National Bank,	"	The Real Estate Trust Co.,	"
Manhattan Savings "	"	Union National Bank,	"
Merchants' Exchange "	"	The Real Estate Trust Co.,	Brooklyn.
Murray Hill Bank,	"	Third National Bank,	New York.
North River National Bank,	"	Hanover Bank,	"

MURRAY HILL BANK, *New York:*

We are much pleased with your instrument, and would not wish to be without it.

SHOE AND LEATHER NATIONAL BANK, *New York:*

I consider the principle upon which the "Germicide" operates as fulfilling what is required in a sanitary way.

Germania Fire Ins. Co.,	New York.	Pacific Fire Ins. Co.,	New York.
Globe " " "	"	Rutgers " " "	"
Greenwich " " "	"	Westchester Fire Ins. Co.,	"
Hanover " "	"	Amazon Fire Ins. Co.,	Cincinnati.
Knickerbocker Fire Ins. Co.,	"	" " " "	New York.
Lloyds' Plate Glass " "	"	Charter Oak Life Ins. Co.,	"
Mutual Life " "	"	Continental Fire " "	"
Niagara Fire " "	"	Equitable Life Assurance Society,	"
Northern " " "	"		

AMAZON FIRE INS. Co., *Cincinnati:*

The application appears to be all the proprietors claim for it.

GAZZAM GANO, *President.*

EQUITABLE LIFE ASSURANCE CO., *New York:*

It has entirely removed all the sewer gas and smell from the Equitable office. It seems to me that this appliance will be of great efficiency in removing causes of disease.

E. W. LAMBERT, M. D, *Medical Examiner*

EQUITABLE LIFE ASSURANCE CO.:

Since its introduction all foul odors have disappeared.

EDWARD CURTIS, M. D.

EQUITABLE LIFE ASSURANCE CO., *Boston:*

From all I can ascertain should think the "Germicide" thoroughly well adapted for the purpose designed.

D. W. RUSSELL, *Manager.*

MUTUAL LIFE INSURANCE CO., *New York:*

I take pleasure in recommending your "Germicide." As a deodorizer it is perfect, and upon the principle of its construction I believe it to be what it claims, a "Germicide"

GLOBE FIRE INSURANCE CO., *New York:*

I would not have it removed for ten times the amount it cost.

ALFRED A. REEVES, *President.*

THE LAMAR INSURANCE CO., *New York:.*

The Lamar Insurance Co. may be put in a list of names who have it in use with approval.

GERMANIA INSURANCE CO., *New York:*

Your apparatus in this building works so satisfactorily that I wish to introduce it into my own residence.

RUDOLPH GARRIGUE, *President.*

WALTER GILLETTE, *Medical Examiner.*

NIAGARA FIRE INSURANCE CO., *New York:*

The "Germicide" placed in one of our closets previously abandoned as too offensive for use, has rendered it pleasant and free from disagreeable odors.

J. W. WIGGINS, *Cashier.*

Brooklyn Railroad Co. Depot and Offices, New York.
Bushwick Railroad Co. Offices, "
Chicago, Milwaukee & St. Paul Railroad Offices, New York.
Chicago, Rock Island & Pacific Railroad Offices, New York.
Chicago & Atlantic Railroad Offices, "
Lehigh Coal & Navigation Co. Offices, New York.
Merchants' Despatch & Transfer Co. Offices, New York.
New Jersey Central Railroad Depot, New York.
New York, Lake Erie & Western Railroad Offices, New York.
Second Avenue Railroad Co.'s Offices, New York.
Third Avenue Railroad Co.'s Offices, New York.
Trunk Lines' Commission Offices, New York.

Adams Express Co., "
" " " Cincinnati.
American " " New York.
National " " "
New " " "
United States Express Co., Cincinnati.

Steamship "Assyrian Monarch."
" "Egyptian Monarch."
" "Lydian Monarch."
" "C. H. Notham."
" "City of Chester."
" "City of Troy."
" "City of Washington."
" "Ferdinand de Lesseps."
" "Saratoga."
Steamship "State of New York."
" "St. John."
" "Sylvan Dell"
" "Twilight."
" "Wyoming."

Southern Pacific Railroad Co. Offices, New York.
Chesapeake & Ohio Railroad Offices, New York.
New York Herald, "
" " " uptown branch, "
Times Building, Chicago.
Tribune " "
Staats Zeitung Building, "
Inter-Ocean " "
Herald " "
Daily News " "
Metropolitan Block, "
Pullman Palace-Car Co., "
First Regiment Armory, "
Metropolitan Telegraph and Telephone Company, New York.
New York Mining and Stock Exchange, New York.
American District Telegraph Co.'s Offices, New York.
Mutual Gas-Light Co., "
Cincinnati Gas-Light Co., Cincinnati.
Western Electric-Light Co., New York.
City Buildings, Cincinnati.
Brooklyn Post-Office, Brooklyn.
Hamilton County Court-House, Cincinnati.
Mercantile Library, New York.
Chicago Public Library, Chicago.
Brooklyn Navy-Yard, Brooklyn.
New York Medical College, New York.
Etc., Etc.

ADAMS EXPRESS CO., *New York:*

I am pleased to inform you that the "Germicides" work satisfactorily.

JOHN HOEY.

AMERICAN DISTRICT TELEGRAPH CO., *New York:*

I cheerfully recommend them. I have given orders to-day for six to be put in offices not before supplied with them. E. W. ANDREWS,

President.

THE BRADSTREET CO., *New York:*

The test we have given the "Germicide" has so far proved satisfactory.

THE HERALD, *New York:*

The "Germicides" in operation in the composing-room of this establishment work satisfactorily.

TRUNK LINE COMMISSION JOINT EXECUTIVE COMMITTEE, *New York:*

We have had the "Germicides" connected with our closets since December, 1880, the mere statement of which fact, I think, can be taken as an indorsement of our belief in the merit and efficiency of the apparatus.

H. C. BLYE, *Secretary.*

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING, *New York:*

It has fully answered my expectations, and I would cordially recommend it as a source of comfort and health.

NEW YORK MINING AND STOCK EXCHANGE, *New York:*

We find that it gives general satisfaction. R. K. COOKE,
Chairman Committee of Arrangements.

THE METROPOLITAN TELEPHONE AND TELEGRAPH CO., *New York:*

We have decided to retain the "Germicide" so long as it works so satisfactorily as at present. W. H. ECKERT,
General Superintendent.

NEW YORK NAVY YARD:

It gives me pleasure to state that I believe it to be a veritable Killer of the Green Germs and destroys all disagreeable odors. I should be pleased to know that every house within my command was furnished with your appliance.

JOHN H. UPSHUR,
Commodore U. S. Navy.

THE BERKLEY SCHOOL, *New York:*

I like the "Germicide" so much in my basement that I should like to have another put into my third floor before June 1st. JOHN S. WHITE.

DONAI INSTITUTE, *New York:*

We heartily recommend your "Germicide" to all our friends. It has accomplished all it was announced to do, and cannot fail to meet with approbation in all cases where it is fairly tried. E. SCHMIDT DONAI.

NEW YORK LATIN SCHOOL, *New York:*

I believe that it has been productive of the health of my pupils. I *know* that it has been a source of great comfort. V. DABNEY.

ST. LOUIS COLLEGE, *New York:*

It gives me pleasure to state that the "Germicide" placed in our school has given full satisfaction. JOHN P. BROPHY,
President.

ST. VINCENT'S INDUSTRIAL SCHOOL, *New York:*

We are very much pleased with the "Germicides." We have had them in use for some time, and we have found them invaluable.

SISTERS OF CHARITY.

TRINITY SCHOOL, *New York:*

I have used the "Germicide" and find it very effectual.

R. HOLDEN, *Rector.*

MANUFACTURERS, MERCHANTS, ETC., ETC.

S. Adam & Son, New York, Manufacturers Ladies' Undergarments:—The "Germicide" has given us entire satisfaction for the last two years, and as to its general merits and efficiency we can only say that the "Germicide" leaves nothing to be desired.

S. Brill & Co., New York, Manufacturers of Undergarments, etc.:—We heartily recommend the "Germicide," having used the same to our entire satisfaction.

Harty Brothers, New York, Ladies' and Children's Wear:—The "Germicide" placed in our closet proves satisfactory, and we think it well adapted for factories and dwellings.

S. & G. Lorsch, New York, Ladies' and Children's Undergarments:—We have the "Germicide," and find it to work satisfactory, and can strongly recommend the same.

A. & A. J. Stein, New York, Ladies' Undergarments, Robes, and Suits:—We cannot help speaking highly of it, as being of so much benefit to us. We could not be without it.

Siegel Brothers, New York, Manufacturers of Undergarments:—It gives us great satisfaction, and recommend the same as a useful disinfector.

Simon Sterns & Co., New York, Manufacturers Ladies' Undergarments, etc.:—We are using the "Germicide," and find it splendid.

Riggs & Page, New York, Manufacturers Felt Skirts:—We are perfectly satisfied with the "Germicide," and consider it a very good thing.

American Suit Manufacturing Company, New York:—Can only speak of it in the highest terms. Since using it we no longer have the unpleasant smells of sewer-gas.

D. B. Babcock & Co., New York, Manufacturers Cloaks and Suits:—Your "Germicide" has been of invaluable service to us. We recommend it to all who wish to expel sickness from their residences or business establishments, and preserve the best of health.

Freitag & Vogel, New York, Misses' and Children's Suits and Cloaks:—The "Germicide" is very satisfactory to us.

Meyer, Jonasson & Co., New York, Cloaks, Suits, etc.:—Works well and gives satisfaction.

Jackman & O'Hara, New York, Manufacturers Cloaks, Suits, etc.:—We look upon it as a necessity in any building where a number of people are employed, and cheerfully recommend its use.

C. M. Lamline & Co., New York, Infants' Cloaks, Robes, Dresses, etc.:—Having had the "Germicide" attached to closets in my work room for some time, I find no hesitancy in recommending it as a disinfector.

Max Lasker, New York, Cloaks and Suits:—The "Germicide" answers completely the purpose it is put up for.

M. Nathan & Co., Suits, Cloaks, etc.:—We have found that it does all that you claim for it. We very cordially recommend it to all.

P. Boesen, New York, Dress Trimmings:—It does all I expect it to do—that is, to keep the foul air from gathering in the closet.

Wm. Weiss, New York, Dress Trimmings and Buttons:—The "Germicide" has given satisfaction. It answers its purpose perfectly.

Haraux & Co., New York, Embroidering Company:—We are entirely satisfied with the "Germicide," and wish to continue its use.

Paul Guminner, New York, Manufacturer Ladies' Neckwear Novelties:—For three years I have been using the "Germicide" to my entire satisfaction. I feel that I could not do without them.

P. Kleeberg, New York, Manufacturer Ruffling and Lace Novelties:—Find it a most valuable acquisition, particularly for manufacturing establishments.

Silberberg Bros., New York, Manufacturers Rufflings, Lace Goods, etc.:—We would no more be without it than without a fire on a cold winter day

Stanton Bros., New York, Manufacturers Silk and Lace Goods:—Its efficiency has exceeded our expectations. We never write puffs, but are glad to commend a good thing.

H. A. Whiting, New York, Manufacturer Fine Straw, Felt, and Fancy Goods:—I can confidently recommend its use to all factory owners as a first-class disinfector.

Joseph Kaufmann, New York, Feathers:—It would be universally used should it be known to the public.

Keim Bros., New York, Manufacturers Flowers and Feathers:—We have found your "Germicide" has done all you represented, and have reason to be well satisfied with it.

H. Th. Kremer, New York, Manufacturer Flowers and Piquets:—I am perfectly satisfied with your apparatus, the house being free of all the evil odors which used to prevail.

Strouse, Legg & Co., New York, Importers and Manufacturers of Flowers:—It is very satisfactory to us.

B. Wohlgemuth, New York, Manufacturer of Ostrich Feathers:—I beg to testify to the efficiency of the "Germicide." I find it a most valuable acquisition.

Wurzburger & Koch, New York, Manufacturers Flowers, etc.:—We are satisfied with the "Germicide," and believe that it has been of benefit to us.

Fred. Butterfield & Co., New York, Importers, etc.:—It affords us pleasure to recommend the disinfector you have placed in these premises for us.

Wm. Ewart & Son, Importers of Crepe, etc.:—We consider the "Germicide" is useful, and it answers our expectations.

B. Heine & Co., New York, Importers:—The "Germicide" is up to the mark.

Hitchcock & Potter, New York, Importers:—We can recommend the "Germicide" as the best disinfector we have ever used.

Georgis Mesurin, New York, Importer:—I am satisfied with the "Germicide" and think I could not do without it.

Chas. E. Rycroft, New York, Importer:—I find it a good thing and well worth the money.

Albert, Haager & Waldburger, New York, Importers' and Manufacturers' Agents:—We take pleasure to inform you that we are entirely satisfied with the "Germicide."

Goldschmidt, Bachrach & Co., New York, Importers and Manufacturers Kid Gloves and Glove Skins:—Having used the "Germicide," we cheerfully express our satisfaction regarding the benefit we derived from it as a disinfector.

J. H. Hamburger, New York, Commission Exporter and Importer:—I herewith cheerfully recommend it to all who are friends of sanitary order.

Lee, Tweedy & Co., New York, Commission Merchants:—Your apparatus has given us perfect satisfaction.

R. Elias & Co., New York, Manufacturers Shirts, etc.:—We are perfectly satisfied with your "Germicide." It has proven successful in making our premises healthful, and has driven all bad odors from our loft.

Keep Manufacturing Company, New York, Manufacturers Shirts and Furnishing Goods:—We find them to be a most valuable acquisition.

V. Henry Rothschild, Manufacturer Shirts, Drawers, etc.:—The introduction of your "Germicide" in my place of business has proved all that you claim for it, and in every way satisfactory.

H. Richter's Sons, Manufacturers Men's Neckwear:—Your apparatus gives us entire satisfaction.

Chas. Fox's Son & Co., New York, Caps, Hats, etc.:—We are highly pleased with them, and believe that they prove themselves to be all that is said about them.

Jehial Read & Co., New York, Manufacturers Hats and Straw Goods:—We have received great comfort from its use, and would not do without it for double its cost.

D. & M. Bruhl, New York, Manufacturing Jewelers:—As to its merits and efficacy, it meets our sanguine approval.

Newwitter & Rosenheim, New York, Manufacturing Jewelers:—The "Germicides" in use give good satisfaction.

Oppenheimer Brothers & Vieth, Manufacturing Jewelers and Watches:—The "Germicide" in our establishment has been entirely satisfactory.

R. Tannenbaum, New York, Manufacturing Jeweler:—I can highly recommend the "Germicides." I am satisfied with its results.

Stone & Rosenblatt, Manufacturing Jewelers:—We are highly pleased with your "Germicide."

Hill, Moynan & Co., New York, Dry Goods:—We consider it of great value, and would recommend it for health and otherwise.

Edward Ridley & Sons, New York, Dry Goods:—We have in use thirteen "Germicides," and find them highly satisfactory.

S. Sulzberger, New York, Dry Goods:—We are pleased with the "Germicide," as it has fully responded to all representations made.

Madame Griswold & Co., New York, Corsets, etc.:—We have been using the "Germicide" with results perfectly satisfactory to us.

Frankel & Levy, New York, Manufacturers Knit Goods:—We can say that we are perfectly satisfied with the "Germicide." It is just as you represented it.

A. S. Herman, New York, New York Knitting Works:—The "Germicide" works to my satisfaction, being a thorough disinfectant.

A. E. Bamburger & Co., New York, Manufacturers of Clothing:—We can recommend it to be a first-class disinfector.

Dessar Bros., New York, Manufacturer of Clothing:—The "Germicide" has given us much satisfaction.

I. L. Talk & Co., New York, Manufacturers of Clothing:—I shall recommend the "Germicide" to all my friends and also manufacturers of every class of goods employing any number of hands.

Herskind & Co., New York, Clothing:—We have found its use beneficial.

Hochstadter Bros., New York, Manufacturers of Clothing:—Very satisfactory and would not be without it.

Hammerslough Bros., New York, Manufacturers of Clothing:—We take pleasure in recommending it to the public generally.

L. Levenson & Co., New York, Clothing:—Your apparatus has given full satisfaction. We gladly recommend it to the public.

Levy Bros. & Co., New York, Manufacturers of Clothing:—We would not do without the "Germicide" at any price.

McKeon & Todd, New York, Manufacturers of Clothing:—The "Germicide" is in every way satisfactory.

John Paret & Co., New York, Manufacturers of Clothing:—We are much pleased with your "Germicide," and take pleasure in testifying to their efficacy. Please supply us with two more.

Rindskopf Bros. & Co., New York, Manufacturers of Clothing:—We do not hesitate to say that any manufacturing establishment without your appliances does not pay the proper attention to the health of their employees.

Wm. Ronsheim, Cincinnati, Manufacturer of Clothing:—I find it an excellent thing and well worth the price charged.

Seligman May & Co., New York, Manufacturers of Clothing:—We find that it is of real utility and cheerfully commend it to the public generally.

C. & S. Werner & Co., New York, Manufacturers of Clothing:—It has responded to our anticipations in proving itself a source of comfort. We can cheerfully recommend them.

Herts Brothers, New York, Cabinet and Upholstery Warerooms:—We are well satisfied with its results as tending to make our rooms more healthful.

Lann & Saile, New York, Cabinetmakers and Decorators:—We wish to inform you that the "Germicide" used in our factory gives full satisfaction.

Fords, Howard & Hurlbert, New York, Standard Books:—Your apparatus has been very thoroughly tested, both here and at Mr. Fords' residence, and the result in both instances is perfectly satisfactory.

Tainter Bros., Merrill & Co., New York, Publishers:—We take pleasure in saying that we believe the "Germicide" is giving entire satisfaction.

Donaldson Bros., New York, Steam Lithographic Printers:—I am so well pleased with the operation of the "Germicide" placed in our establishment that I would like to have one placed in my residence.

The Hatch Lithographic Co., New York:—We cheerfully indorse your "Preventive System" as applied to the suppression of sewer-gas, thereby promoting the public health.

Trow's Printing and Bookbinding Co., New York:—The "Germicide" has worked to our satisfaction and fulfilled, we think, all the considerations proposed.

A. S. Barnes & Co., New York, Manufacturing Stationers:—We concur in the above.

Edward A. Kingsland, New York, Stationer:—With pleasure I give expression for the great benefit the machine has proved in my place of business.

Koch, Sons, & Co., New York, Manufacturing Stationers:—Your automatic disinfector performs its work thoroughly, being in every particular what is claimed for it.

Philip L. Sondheim, New York, Manufacturing Stationer:—It gives me great pleasure to state that I am very much pleased with it, and I would also say I would not be without one at any cost.

S. Trier & Son, New York, Card Manufacturers:—It performs its work admirably and successfully, and shall recommend it whenever I can.

Daniel Slote & Co., New York, Blank Book Manufacturers:—We can recommend the use of the "Germicide" Preventive System. We think it one of the best sanitary improvements we have ever made.

Scheuer & Bro., New York, Manufacturers and Importers Pocket Books, etc.—Your apparatus has given us entire satisfaction, and we have no reason to regret having gone to the expense of having same placed throughout our establishment.

Manchester & Bingham, New York, Manufacturers Paper Boxes:—It has proved efficacious in suppressing the sewer-gas in our factory to our utmost satisfaction.

Leopold Sohn & Bro., New York, Manufacturers Paper Boxes:—We heartily recommend it to all.

Bradley, Kurtz & Co., New York, Manufacturers of Bags:—If we had understood their advantage, we would have adopted them long ago.

H. Abrahams, New York, Manufacturer of Cigars:—I find the "Germicide" indispensable.

M. & E. Solomon, New York, Importers of Havana Tobacco, etc.:—We have found the "Germicide" to be perfectly satisfactory.

Straiton & Storm, New York, Manufacturers of Cigars:—You may be assured that we shall recommend the "Germicide" to our friends, and you may consider yourself at liberty to refer to us at any time.

Great American Tea Co., New York:—We are perfectly satisfied with the "Germicide"—its general merits, etc.

Stein Manufacturing Co., New York, Coffins, Caskets, etc.:—We can simply say that we are perfectly satisfied with the "Germicide."

A. Roemer & Son, New York, Costumers and Armorers:—We find it to be what it is represented. It is a most wonderful machine.

J. S. Conover & Co., New York, Grates and Fenders:—We find it fully up to what it professes to be, and can heartily recommend it as a purifier and disinfectant.

Ivan Lloyd, New York, Real Estate and Insurance:—The "Germicide" is in use in a number of houses under my control and give the most complete and perfect satisfaction. I deem it indispensable and most heartily and earnestly recommend it.

Joseph Kopetzky, New York, Wine and Spirit Merchant:—An act from the legislature would be advisable compelling landlords to place the "Germicides."

Julius Pauly, New York, Manufacturer Human Hair Goods:—Would not be without it.

M. A. Cumming, New York, Hat and Bonnet Dies:—I have been well satisfied with it and would not do without it.

Joseph Ullman, New York, Furs, Hides, Deer Skins, etc.:—I am very well satisfied with the use of your "Germicide."

Peters & Calhoun Co., Saddlery, etc.:—Gives very good satisfaction. Could not do without it.

Benedict, Hall & Co., New York, Boots and Shoes:—They are, we think, the best disinfectors in use.

Chas. W. Dickel & Co., New York, Riding Academy:—The "Germicide" in use in our establishment works to our satisfaction.

Bogardus, New York, Photographic Gallery:—The "Germicide" does its work *well*, and to the satisfaction of all concerned.

Chas. D. Fredricks, New York, Photographer:—It performs all that is claimed for it, and I would be very sorry to be without it.

Weber's, New York, Portraits:—Find it an immense success, and recommend it at every occasion.

Wessel, Nickel & Gross, New York, Manufacturers Pianoforte Actions:—We can freely indorse the invention as reliable and of great benefit.

SURGEON GEN'LS OFFICE
LIBRARY.

Harm is far more likely to come to us from noxious gasses in the air we breathe than from foreign substances in the food we eat. **PROF. ATTFIELD, F. R. S.**

TERMS.

The variation in prices for supply of chemicals for more than one Germicide will only be made when the number of Germicides ordered are to be placed in one building.

NO VARIATIONS from these terms ALLOWED under any circumstances.	Cost for placing each.	COST PER ANNUM Without cost of placing. Each.	1st payment 10 days after placing, and for one month's chemicals, inspection, etc., each.	Quarterly payments thereafter for maintenance and inspection in advance, each.
For 1 Germicide,	$3 00	$12 00	$4 00	$3 00
" 2 Germicides, each,	3 00	10 00	3 85	2 50
" 3 to 8 inclusive, "	3 00	9 50	3 80	2 38
" 9 to 14 " "	3 00	9 00	3 75	2 25
" 15 to 20 " "	3 00	8 50	3 70	2 13
Over 20 " "	3 00	8 00	3 67	2 00

Payable quarterly in advance, excepting the first payment, which will only include $3.00 cost for placing the Germicide, and one month's supply of chemicals.

When payments of bills are made yearly in advance, an allowance of 10 per cent. will be deducted from same.

The Germicides are made from various kinds and combinations of wood.

INVESTIGATE

EXPERIENCE CONFIRMS THAT

I. **Sewer-Gas** enters all houses and that odor does not always reveal its presence.

II. **Receivers, Traps, Soil-Pipes, Etc.,** get befouled with fæcal matter until they become seething cesspools, creating gases and disease germs far more deadly than the diluted gas from the main sewer.

III. **Traps** do not exclude gases, owing to the absorbing quality of water. Traps syphon and evaporate.

IV. **No Mechanical Device Known** can effectually prevent the entrance AT ALL TIMES of sewer gas and its constituents into buildings.

V. **A Few Minute Germs** entering a delicate constitution are as bad as a thousand.

VI. **Chemical Purification Automatically and Continuously** applied to the drainage system of buildings insures HEALTH, COMFORT, and SAFETY.

VII. **The Deficiencies** of water carriage and ventilation are all met by THE "GERMICIDE" SYSTEM.

THE GERMICIDE SYSTEM.