

Washington Sewer-Cleaning

..... Company

OWNING AND OPERATING

The Knowles

Patent

..... Sewer Cleaner

For the.....

District of Columbia.



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OFFICE: ROOM NO. 1 BUILDERS' EXCHANGE 13TH ST. N. W.

The first duty of man is to protect the health of his family, and he should take every step known to modern science within his means to make the home his family has to live in as healthy and comfortable as possible.

House-owners and housekeepers know that the *most* unhealthy thing about a house is defective sewerage and dirty waste-pipes. These sewer and waste-pipes are constantly choking up with the accumulations of filth and putrid grease, which generate those unhealthy gases to which the intelligent physician can trace the origin of diphtheria, scarlet and malarial fever, and most of the diseases which mankind is heir to.

No house is tenantable where defective sewerage and foul waste-pipes exist, and the landlord who will rent such a house, or a man who will move his family into a house where such defects exist, is responsible to both God and man.

To the offensive matter which adheres to your house sewer and waste-pipes we now trace most of those terrible epidemics which scourge the thickly-settled districts of otherwise healthy locations.

Physicians, philanthropists, and sanitarians all agree that a defective sewerage, foul waste-pipes, are a curse to mankind and a public nuisance, which should be remedied at any cost. Disinfectants and chemicals of various kinds have been tried to remedy this evil, but the only effectual and positive remedy is mechanical, not chemical.

The KNOWLES PATENT SEWER CLEANER mechanically and positively cleans your sewers and waste-pipes and makes your homes healthy and clean. Its work is sure and positive, and it is so simple that a youth of eight years can understand and operate it.

When this device is attached to your house your waste and sewer pipes are thoroughly cleaned, and can never stop up or get foul again, thus saving the health of your family, to say nothing of the expense and annoyance you are frequently subjected to in tearing up your house, yards, streets, and parking in order to remove stoppages.

This device when once affixed can ever afterward be operated from the *surface*.

This device was introduced in the city of Norfolk, Va., two years ago, and its work has been so good that the City Government has bought the right to apply it to all its main sewers and laterals. It has also been attached to all public schools, hospitals, hotels, and other public buildings, and to several hundred private dwellings. We herewith give a few of the many flattering recommendations received from those who have given it a year's or more trial.

The Washington Sewer-Cleaning Company have bought of Daniel Knowles the full right to attach and operate his Sewer Cleaning Device in the city of Washington, D. C., and have established its office at Room No. 1, Builders' Exchange, where we should be pleased to see you and fully explain the "Knowles Cleaner" in all its details.

The device is easily and cheaply attached to all classes of buildings; and when attached, if the owner or occupant of the premises is not perfectly satisfied with the work it performs, the Company will remove it and refund the amount paid. Remember, it is recommended by all physicians and sanitarians. Remember, one stoppage will cost more to remedy than ten Knowles Patent Cleaning attachments, to say nothing of the stench and filth.

Whenever grease or soap water passes through your waste-pipes from sink, closet, or bath-rooms, the grease or soap particles adhere to your waste-pipes, and are constantly forming therein the most unhealthy, putrid matter, which poisons the air, and you and your family must constantly breathe the gases arising therefrom. A word to the wise is sufficient.

An examination of this device will convince you of its value. Call at our office and examine it; or, if you will send word to our office, we will take pleasure in sending a competent agent to your house, who will, free of charge, explain the Knowles Sewer Cleaner and examine your sewerage and waste-pipes and give you estimates for attachments, etc.

Address—

WASHINGTON SEWER-CLEANING COMPANY.

OFFICE CITY ENGINEER,
NORFOLK, VA., *October 13, 1891.*

*To the Board of Street, Sewer, and Drain Commissioners,
Norfolk, Va.*

GENTLEMEN: The Honorable the Select Council, at its meeting on March 1st, passed the following resolution, to wit:

"Resolved, That the Board of Street, Sewer, and Drain Commissioners examine into the merits of the patent of Mr. Daniel Knowles for the cleaning of sewers and report if the same is desirable to be applied to the sewerage of the city."

This resolution was referred to me, and it was impossible for me to give an opinion until time had elapsed to try the device and compare it with previous methods. I have been compelled to defer reporting on the same until the present moment. In order to try Mr. Knowles' patent I selected the York street extended line, on which the grades are rather flat—the pipe line a six-inch one—and where we had more than ordinary trouble from the accumulation of grease, which at this point occasioned frequent stoppages, not only of the sewer itself, but of the houses connected also. To clean out this line required the digging of holes in the street whenever it became stopped, in order to get a rope through the pipes for the purpose of cleaning them, and the frequency of the stoppage has rendered this the most troublesome lateral in the whole of our sewerage, and the one causing the greatest expense in putting in order. Since Mr. Knowles put in appliance, about a year since, we have not had occasion to disturb the street once, and the opening of the line from stoppage has never required anything but the removal of the manhole plates, and the agitation of the device permanently in the pipes. The saving in expense on this street has been a marked one, and I would unhesitatingly recommend, wherever we have similar trouble, that the appliance be used. I do not mean to say, however, that the application of the appliance to all lines is needed, or even advisable, but only in such places where light grades, or abuse of the original intention of the sewers, and the accumulation of grease occasion frequent stoppages, and where manholes are

few and far between, as is the case in the first section of the sewer constructed.

The point of application of the appliance must be left to your judgment, and need not be considered until the necessity is demonstrated in each instance.

Mr. Knowles also has a modification of his appliance for house connections which, in my opinion, is a good thing and will enable any householder having it to free his connections from stoppage easily and inexpensively. I have no doubt but that this will be gradually adopted by our citizens where stoppages in their lines occur. The settlement with Mr. Knowles for the line already fixed and for the future use of his patent must be a matter for your future consideration, and has no bearing in the matter that you called upon me to report.

Very respectfully,

(Signed)

W. T. BROOKE,
City Engineer.

Read the testimonial of a skilled mechanic who has tested it for eighteen months, and be convinced of its perfect work.

Why do you have your house connections with the public sewer foul with the putrid grease and other offensive matter, which causes such a bad stench in your houses by your pipes being dirty? You can stop this dangerous nuisance by having the KNOWLES PATENT SEWER CLEANER applied. It will do the work, which the following testimonial will show. It is from a practical man who has tested its merits. Read it:

NORFOLK, VA., *April 24, 1891.*

MR. DANIEL KNOWLES.

DEAR SIR: IN ANSWER to inquiry in regard to how your Patent Sewer Cleaner is doing at the St. Vincent de Paul Hospital, I will state that it is doing all that you claim for it and working perfectly satisfactory. I have had charge of the steam plant and sewerage of the hospital for a number of years, and I have had a great deal of trouble with the sewer. Our grounds had to be dug up every time we had any stoppage in the sewer, which was a great nuisance and expense; but since you have had

your Cleaner at work in the hospital we have not had any of our grounds to dig up, nor have we been under any expense whatever for clearing out the sewer. You abated all the nuisance we had with the sewer and cleared us of a great stench that we had about our sinks, because your Cleaner cleans from the head of the sewer line to the street, which leaves our pipes as clean as new. Any one can clean their own sewers with it. They need never stop by a little attention given to them, and I most cheerfully recommend it to any person who needs such an article. Hoping that you may meet with success, I remain yours most respectfully,

JAMES ROAN,
Engineer of St. Vincent de Paul Hospital.

THE NATIONAL BOARD OF MARINE UNDERWRITERS OF
NEW YORK.

D. KNOWLES, Esq.

DEAR SIR: In answer to your inquiry regarding my views of your Patent Sewer Cleaner, have to state that it has proven very satisfactory, doing all that you claimed for it. Previous to applying it I was put to a great deal of trouble and expense, in consequence of having back yard dug up every time the sewer got stopped up. In addition there was a bad stench emitted from kitchen sink, caused by grease adhering to the pipes, but since the application of your Cleaner have had no further expense or nuisance. I consider it one of the best sanitary appliances that I know about. There has been no expense since applied.

WM. LAUDER.

OFFICE OF JAMES REID & Co.,
No. 87 Main Street,
NORFOLK, VA., Sept. 3, 1891.

Mr. D. KNOWLES, *Norfolk, Va.*

DEAR SIR: In reply as to our opinion of your Patent Sewer Cleaner, we will say that we think it a success in every respect, and that it is all that you claim for it.

There is no expense attached to it.

Yours truly,

JAMES REID & CO.

Here is a testimonial from a rental agent who had a great deal of trouble with two houses. He has no trouble at all since the KNOWLES PATENT SEWER CLEANER has been applied to them.

OFFICE OF GEORGE W. JOHNSTON,
No. 10 Holt Street,
NORFOLK, VA., Nov. 7, 1891.

MR. DANIEL KNOWLES.

DEAR SIR: With reference to your inquiry pertaining to your PATENT SEWER CLEANER which was applied to houses numbers 28 and 30 Mariner street about ten months ago, I will say that it has been a perfect success. Before said PATENT SEWER CLEANER was applied the tenants were continually complaining about the sewer pipes being stopped, which necessitated the lane and yards being dug up by the plumbers time and again. I remember that I had to have the lane dug up twice in one month, but since your Cleaner was applied I have not had a single complaint. As a sanitary measure I think it excellent, as it keeps the pipes perfectly clear of grease and everything that causes foul odors.

Very respectfully,

F. E. NOTTINGHAM, *Agent*,
W. H. Turner's Estate.

OFFICE, BOARD OF STREET, SEWER,
AND DRAIN COMMISSIONERS,
NORFOLK, VIRGINIA, November 20, 1892.
SEWER PUMPING STATION.

To whom it may concern:

This is to certify that I am perfectly acquainted with the device known as the Knowles Sewer Cleaner (or stoppage preventer), and I can here say with truth and candor that it is the only contrivance that has come under my notice that will clean sewers from the surface of the earth without that disagreeable odor that naturally arises from sludge and excrement which has been stopped or confined in the laterals or pipes.

Since it has been applied on our sewage system it has not cost the city a penny to break the stoppage, some-

thing unparalleled in the history of this Department over the old mode of excavating to find cause, and then probably not in twenty feet of the obstruction.

Respectfully,

(Signed) H. C. FRASIER,
Engineer of Station.

NORFOLK, VA., *December 24, 1892.*

THE KNOWLES PATENT SEWER CLEANER has been used by the Public Schools, in their connections with street sewers of this city, for more than a year. The device has proven eminently satisfactory, both as a matter of economy in saving expense of plumbing and keeping the sewers unobstructed at all times. We feel now as if the schools could not get along without it. The sanitary conditions and comfort of the premises are greatly enhanced by the use of the Knowles Cleaner, as is manifest upon experience with it.

Very respectfully,

K. C. MURRAY,
Superintendent of Public Schools.

QUEEN STREET PUBLIC SCHOOL.

NORFOLK, VA., *June 17, 1892.*

THE KNOWLES PATENT SEWER CLEANER has been in use in this school property for the past year, during which time there have been two temporary stoppages, and these were freed at once by the Cleaner without any digging and without cost.

Heretofore the stoppages had been frequent and expensive.

The system of water-closets in use is the automatic flushing tank with cess-pool outside. This pool required the service of an excavating company to keep clean, was frequently very offensive, and always a menace to health. The KNOWLES PATENT did away with this pool, and now there are no offensive odors either inside or outside the closets.

As a sanitary device and as conducing to comfort and decency it is entitled to high praise, as a stoppage in the

sewer connections, unless corrected *at once*, necessarily results in a condition of nuisance.

I think Mr. Knowles should be reckoned a public benefactor.

(Signed) JAS. P. BRITT,
Principal.

OFFICE CITY ENGINEER,
NORFOLK, VA., *November 7, 1891.*

To whom it may concern :

This will certify that David Knowles was for several years Assistant Inspector of Plumbing of the city of Norfolk, in which capacity he gave general satisfaction to all. He has a patent for cleaning sewers and connections, which whenever applied has given entire satisfaction. I cheerfully recommend him to any and all persons in need of such service.

Very respectfully,
JAMES R. GUY,
Inspector of Plumbing.

OFFICE CITY ENGINEER,
NORFOLK, VA., *November 17, 1892.*

To whom it may concern :

This is to certify that the bearer, Mr. David Knowles, was for several years in the employ of the city of Norfolk as Assistant Inspector of Plumbing. During that time he devised various methods of cleansing and keeping clear pipes and sewers, and I have given his appliances successful and satisfactory tests. I earnestly bespeak for him a hearing as to his sewer-cleaning appliance and a careful consideration of its merits.

Very respectfully,
W. T. BROOKS,
City Engineer.

The yellow-fever scourge at Memphis, Tenn., and Shreveport, La., in 1873, and through the South during

1878, the last visitation being the most malignant ever known, has been traced by the most eminent physicians to the foulness of pipes in house connections and the want of proper sewerage.

Dr. John A. Roach, sanitary superintendent of the Chicago board of health, in his report on the sewerage of that city, says: "I think it is plain that the number of deaths in a ward is regulated by the number of feet of sewers it contains to each individual in it, no matter what other conditions obtained with regard to the population."

All sanitarians agree that the only effectual way to prevent the disease generated by the accumulation of filth and putrid grease in your pipes is its immediate removal, and the KNOWLES SEWER CLEANER after once being applied will remove the evil.

Any registered plumber of Washington City will be allowed to attach the KNOWLES SEWER-CLEANING DEVICE to sewers or dwellings, upon being registered at our office and receiving our regular permit to do the same.

The attachments so made will in all cases be inspected, when completed, by the Washington Sewer Cleaning Co. Inspector.

WASHINGTON SEWER-CLEANING CO.,

Dr. J. BALDWIN RUTHERFORD,

Supt.

Office: Room No. 1, Builders' Exchange,
Washington, D. C.

