

Modern Plumbing and Heating Systems



Sears, Roebuck and Co., Philadelphia

1928



**We Stand Back of
This Guarantee**
It is your assurance of a
**Satisfactory Heating System and
a Comfortably Warmed Home**



Our Guarantee Stands the
Test in the Scales of Justice

Certificate No.

Certificate of Guarantee

This is to Certify that the *Hercules Heating System* sold by
Sears, Roebuck and Co., to _____ *residing at*
state of _____ *is guaranteed to be of high quality material and work-*
manship throughout.
When installed according to our plans and instructions we guarantee that it will heat all rooms
in which radiators or registers are placed to the temperature specified without forcing the fire.
We guarantee that the material will arrive at your railway station in perfect condition.
We further guarantee that this heating system will satisfy you perfectly that it will give
you the service you have a right to expect; that it represents full value for the price you pay.
If for any reason whatever you are dissatisfied with this heating system we expect
you to return it to us at our expense and we will return your money including all
transportation charges you have paid.



Dated at _____ this _____ day
of _____ U.S.

Sears, Roebuck and Co.

SEARS, ROEBUCK AND CO.
Philadelphia





Hercules Heating Systems

Hercules Boilers, Radiators and Warm Air Furnaces

*The Finishing Touch of
Comfort to the Home*

OUR EXPERIENCE in the development, perfection and distribution of our Hercules Steam, Hot Water and Warm Air Heating Systems extends over a period of more than twenty-five years.

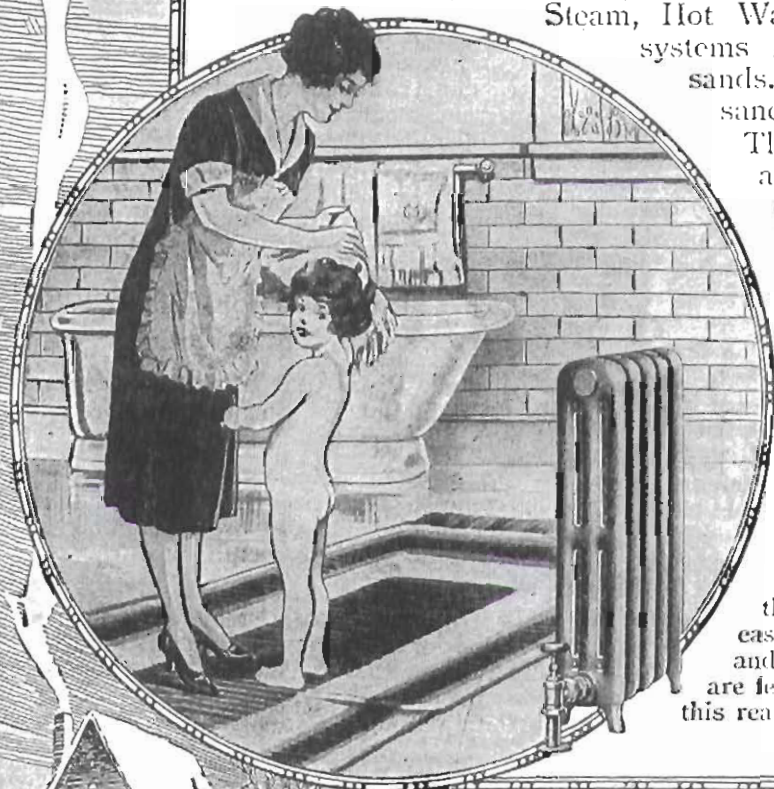
From a small beginning, our heating department has shown steady growth year after year, until our annual sales of modern Steam, Hot Water and Warm Air Heating systems now figure well up into the thousands. We have proved to many thousands of our customers:

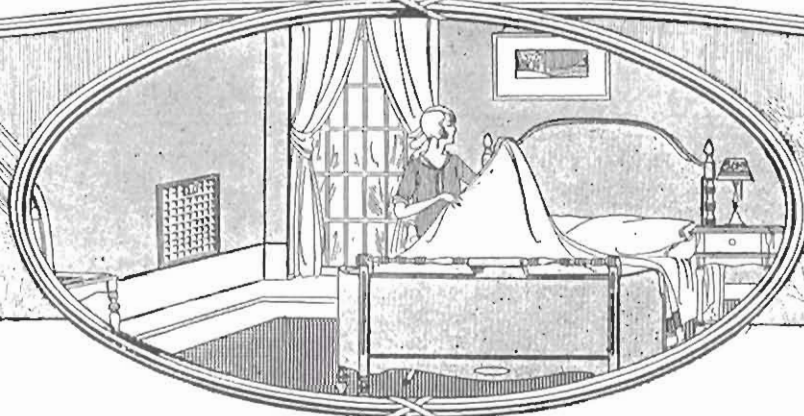
That our Hercules Heating Systems are easy to install. That they fulfill every claim we make for them.

That the broad guarantee under which they are sold and our liberal merchandising policy are a reliable assurance of satisfaction.

Among our millions of customers we know there are still thousands who are depending upon old time heating methods and are not enjoying the comfort and convenience of modern heating systems in their homes.

We are confident that if these thousands of our customers could fully realize what it means to the comfort, health and happiness of the entire family to have this modern improvement in the home, how easy to install, and how moderate our prices and the excellent quality of our material, there are few indeed who would not now be enjoying this real home comfort.





Easily Installed in Any Building, Old or New

Any of our complete Steam, Hot Water or Warm Air Heating Systems can be installed in any building, old or new. It is not at all necessary that the pipes leading to the second floor radiators should be concealed in the partition walls. If your building is already built we can so design your heating system when laying out the plans that these pipes can be carried up in the corners of the rooms.

If you install a hot water heating system, each radiator will require two pipes, one the flow pipe and the other the return pipe. These two pipes can be carried up to the second floor close together in some inconspicuous corner, and they can be nicely bronzed so that they will not detract from the appearance of the room in the least.

Our engineers when designing your system will keep these points fully in mind, and the second floor radiators will be so placed that these pipes will come in the most inconspicuous places.

On a steam heating plant each radiator requires only one single pipe connection, which makes it all the more simple.

If your building is in the course of construction, we will, of course, plan your system, if you wish, so that the pipes will be concealed within the partition walls.

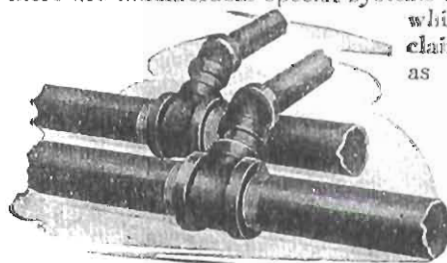
When you write for our estimate be sure to tell us whether your building is already completed or just being built; if it is in the course of construction, state if you would prefer to have the pipes concealed in the walls.

Four Practical Heating Methods

There are four principal types of heating systems in common, practical use. The Hot Water Heating System, the Steam Heating System, the Warm Air Heating System and the Pipeless Furnace. The pipeless furnace works on the warm air principle and, of course, might be classed as a Warm Air Heating System, but it is of such simple and distinctive design that we believe it should be classified separately.

Aside from these four main types of heating system, there are innumerable special systems on the market for

which very strong claims are made, such as vacuum systems, vapor systems, modulation systems, etc. The advantages claimed for these systems, in our opinion, do not justify the increased cost.



Showing how Branch Connections are taken from the main pipes on all our heating systems with close nipples and 45° elbows.

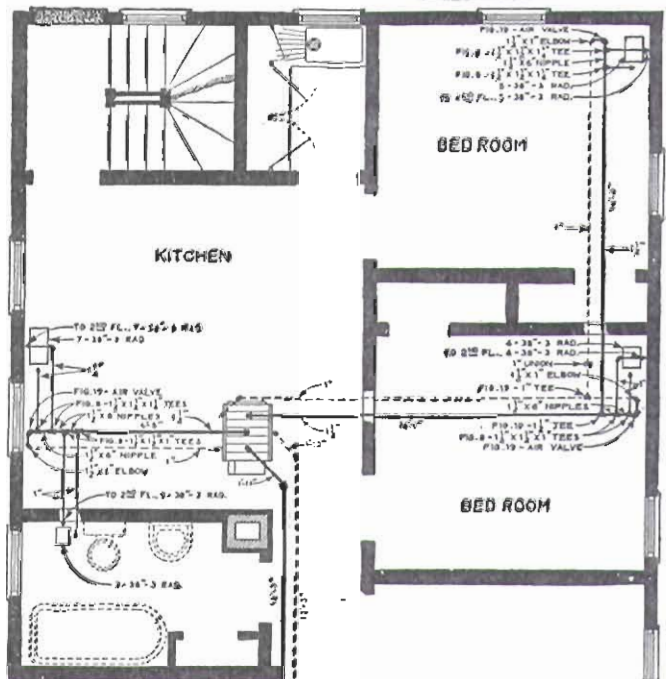
Their disadvantages are very great, due to added complications, special delicately balanced valves, etc., and the complexity of pipes and special devices which they require. It usually requires an expert to install and to operate them properly, and it is difficult to keep them working efficiently after they are installed.

From a practical standpoint the disadvantages of these special types of heating systems far outweigh their advantages.

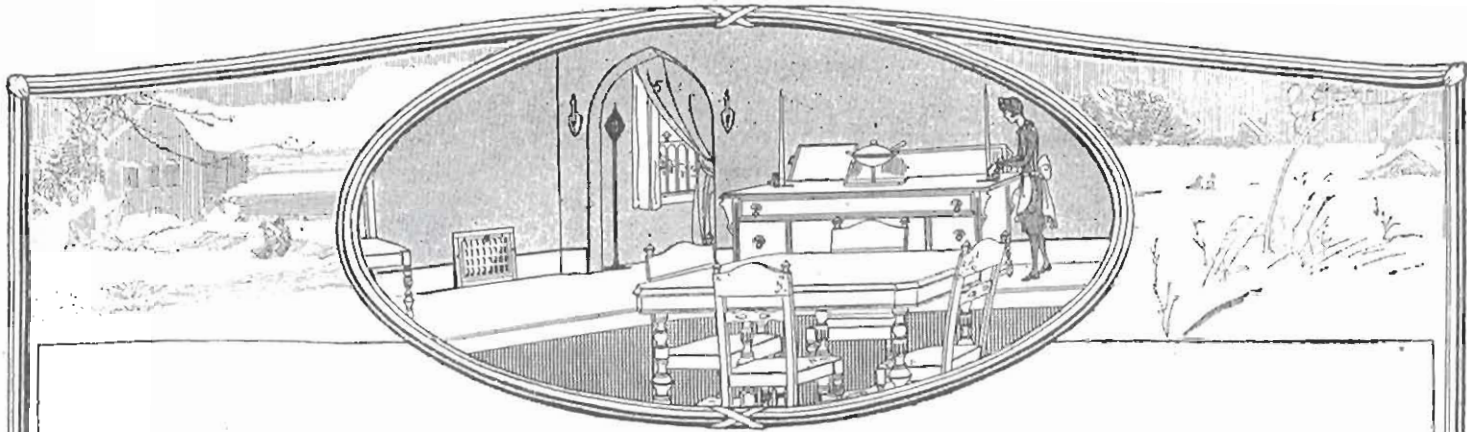
We have found, after our long experience, that for the ordinary residence the hot water heating system with a good relief valve to carry a little extra pressure on the water, the simple single pipe system of steam heating, the simple warm air heating system, or the pipeless furnace are the most practical and satisfactory systems to install.



Flange Unions are placed in the main pipes where they connect to the boiler on all our steam and hot water heating systems.



Part of the Plans Furnished With a Steam Heating Plant. (Very Much Reduced in Size.)



Full Plans and Instructions Sent With Every Heating System

Which System Will I Install?

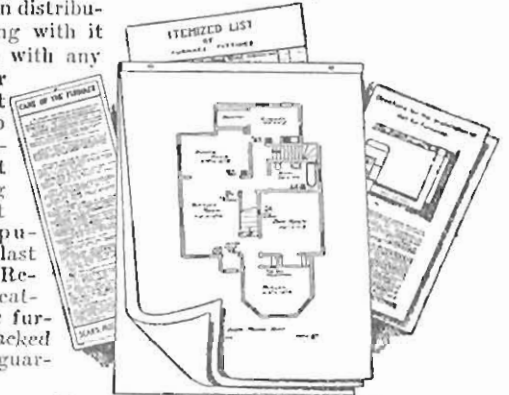
In the following pages we describe the working principle of each of these four practical types of heating systems, any of which we can furnish you. Any heating system we sell you is guaranteed to give satisfactory service.

A Hot Water Heating System has many decided advantages over other heating systems, but, of course, it costs more. It is economical in fuel, simple and easy to operate. It is without a doubt the most generally satisfactory system for home heating.

A Steam Heating Plant is most sensitive and gives a quicker response to firing, but it also cools off more quickly and is not quite as economical in fuel as hot water. A steam heating system costs less than hot water.

A Warm Air Heating System costs less than either steam or hot water. It has the advantage of giving you more space in your rooms, as you do not have to make room for radiators. It is not quite as dependable as a steam or hot water heating plant, however, when far off rooms are to be heated.

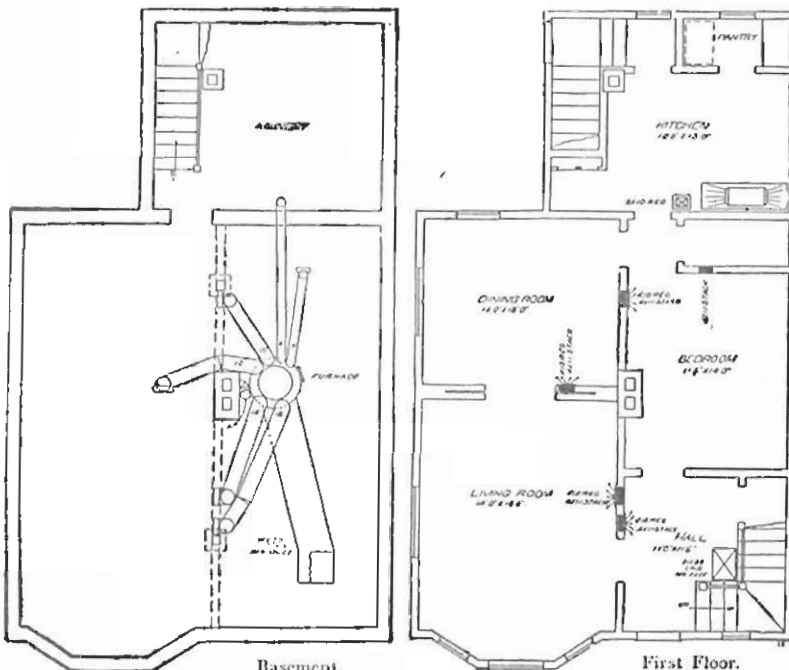
The Pipeless Furnace is least expensive of all heating systems. It gives almost instantaneous response to firing; it is efficient and economical in fuel. Of course, you cannot get the absolutely even distribution of heating with it that you can with any of the other types, but it has proved so generally satisfactory that it has sprung into almost universal popularity in the last few years. Remember, any heating system we furnish you is backed by our strong guarantee.



Plans and Instructions Sent With Your Order.

Let Us Send You an Estimate.

We have enclosed with this catalog one of our special heating system information blanks. Fill it out carefully and return to us. Let us send you an estimate on a complete modern heating system. This will place you under no obligation to us whatever. We will gladly send you an estimate on whatever type of heating system you wish to install. Our prices are remarkably low.



Two of the Working Plans Furnished With a Warm Air Heating Plant.
(Very Much Reduced in Size.)

P. O. Box 8,
Glen Ellyn, Ill.

Sears, Roebuck & Co.,

Attention Heating Department.

Gentlemen:

Regarding Hercules Hot Water Heating System which you supplied to me late in 1916, I now have the pleasure of reviewing my purchase and reporting results as I find them. The total cost of the outfit was \$285.00. There are eleven radiators. The installation cost me nothing excepting my own time and the occasional assistance of some friends.

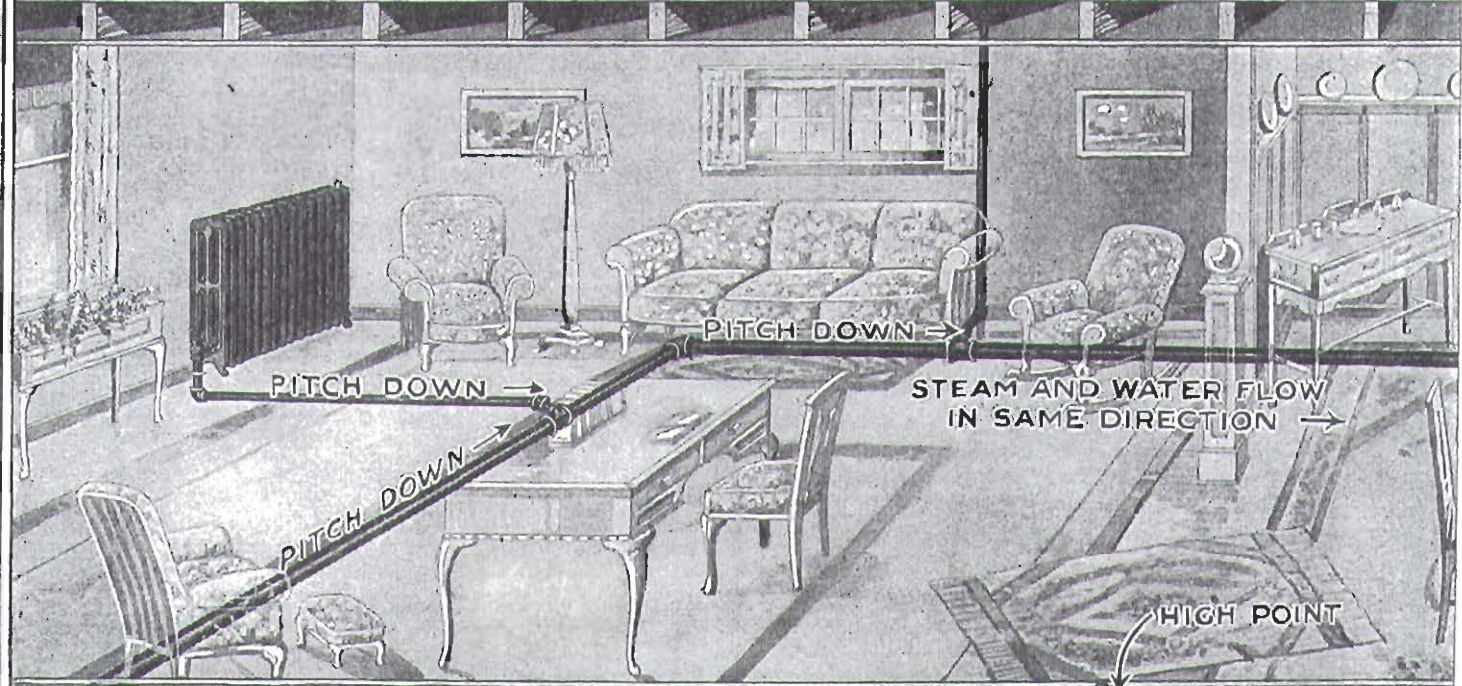
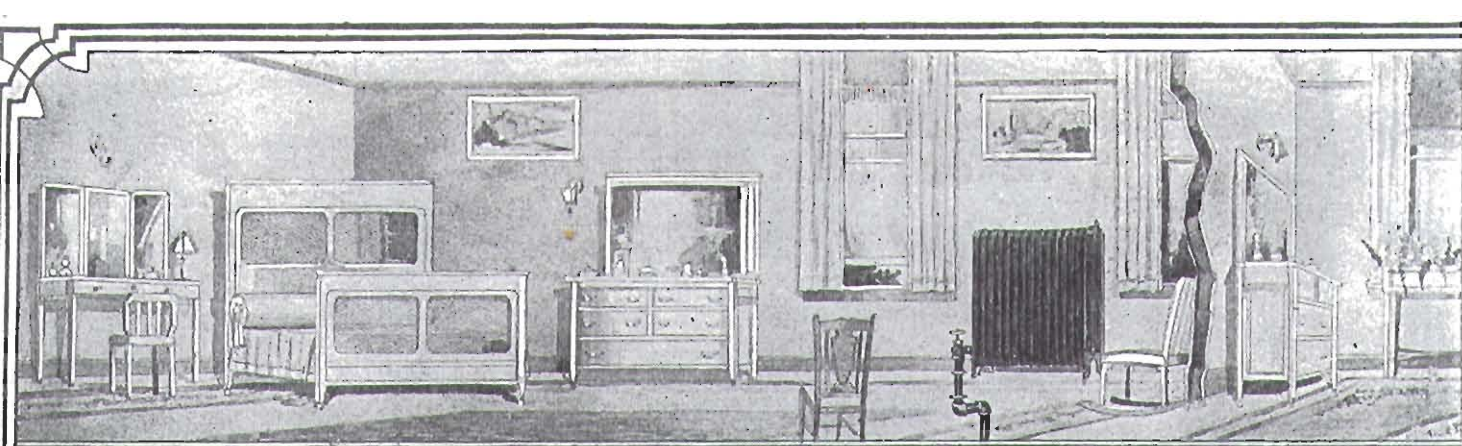
Your printed instructions being the great factor which made the job a success for neither my friends nor myself are mechanics.

My house has eight rooms of no mean dimensions; a hall down-stairs, a spacious landing above and a full sized basement. It is a frame building standing very elevated and exposed, having no protection from other buildings or trees. This I consider an ideal location to give any heating system a real test of merit.

Saturday, January 6, of this year proved to be the coldest experienced in this part of the country during the last twelve years. The thermometer registered 20 degrees below zero. There was a strong wind blowing. Our Hercules Boiler was fed with Franklin County soft coal. An average of 75 degrees was maintained in the living rooms, while the bedrooms registered 60 degrees. Such results under such trying conditions being in my opinion satisfactory in the extreme.

Very truly yours,

Henry W. Cole



The Hercules Steam Heating System

Simple, Positive, Efficient, Noiseless

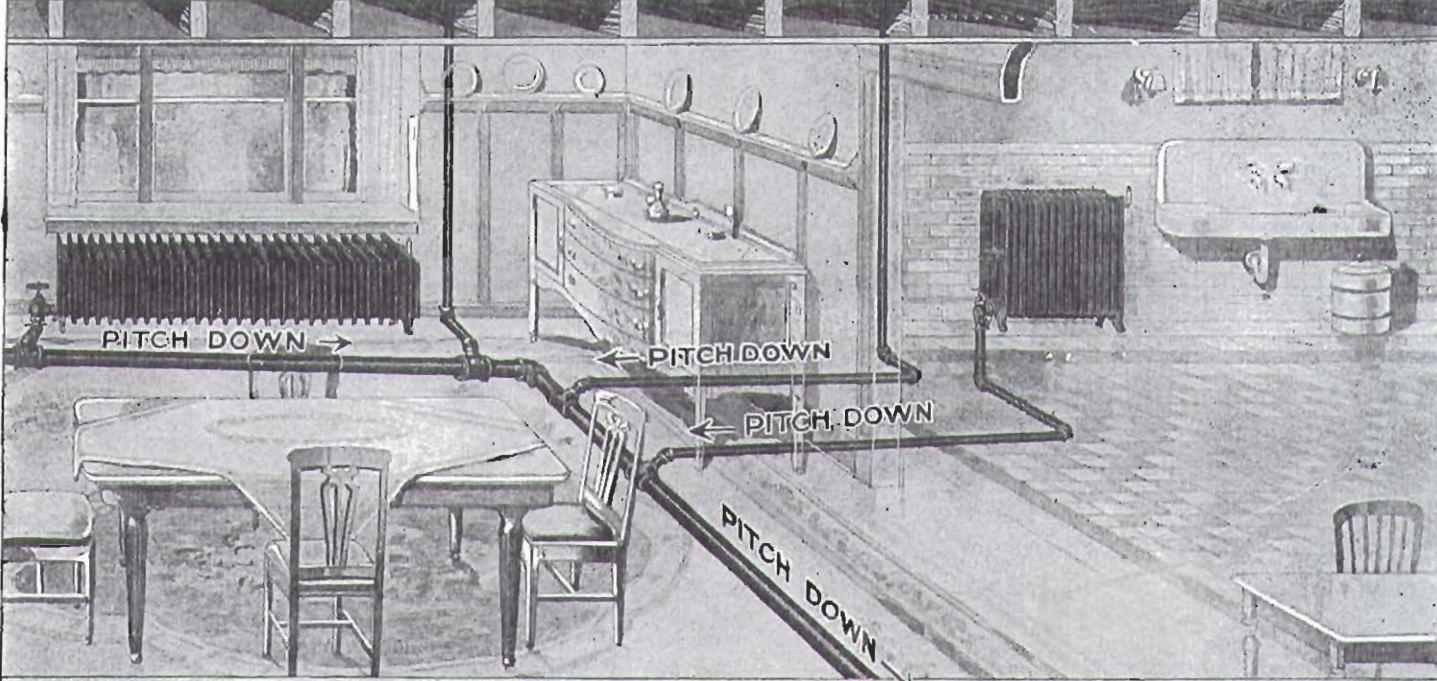
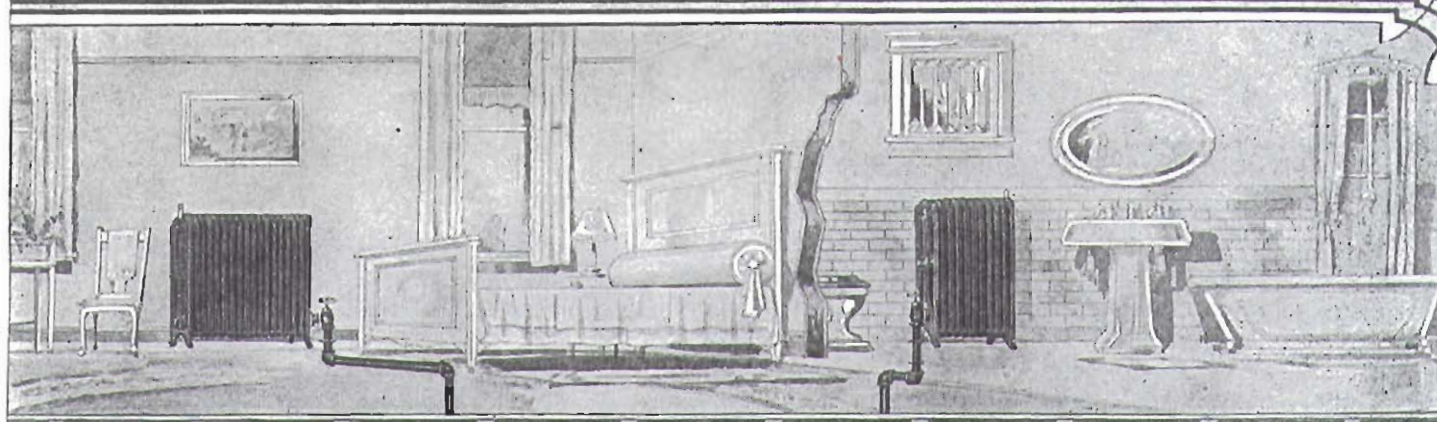
The illustrations on these pages show clearly how our Hercules Steam Heating System works.

To start the system, the water feed cock is opened and the boiler is filled to a point where the water shows about one-half way up in the gauge glass. The feed cock is then closed and the fire is started.

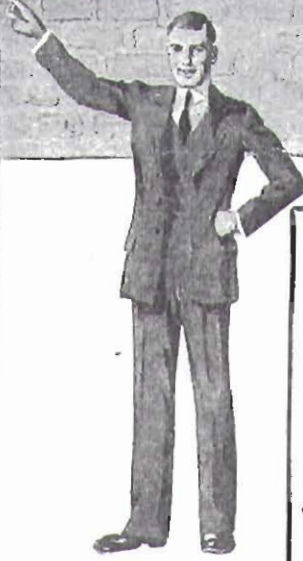
On each radiator and at the return end of the main pipe a small valve should be placed. This is known as an automatic air valve. It is so devised that it permits the escape of air from the system, but an expansible member closes the valve tight as soon as the hot steam strikes it.

The automatic air valves should be placed on the last section of the radiator and about midway between top and bottom, where a special tapping will be found in the radiator section for attaching the air valve. Never place the air valve at the top of the radiator on a steam heating plant.

When the water starts to boil, the steam which is generated creates a pressure, of course, and this steam rises up into the main pipe, forcing the air ahead of it, and the automatic air valves being cold and open, the air escapes at the radiators. As soon as the steam has filled the system to such an extent that all the air has been driven out through the air valves and the hot steam strikes these valves, they close immediately. Of course, the steam condenses back to water when it strikes the cooling surface of the radiators, and if the above illustration is studied carefully it will be observed that the pipes are pitched in such a way that this water flows back to the main pipe and continues its course around back to the boiler, where it is boiled over again into steam, and this same process is repeated over and over. There is no water wasted except what little escapes by evaporation in the form of steam through the air valves before they close tight.



**Main Pipe Is Not
Reduced in Size
Until All
Radiator Con-
nections Are Taken Off**

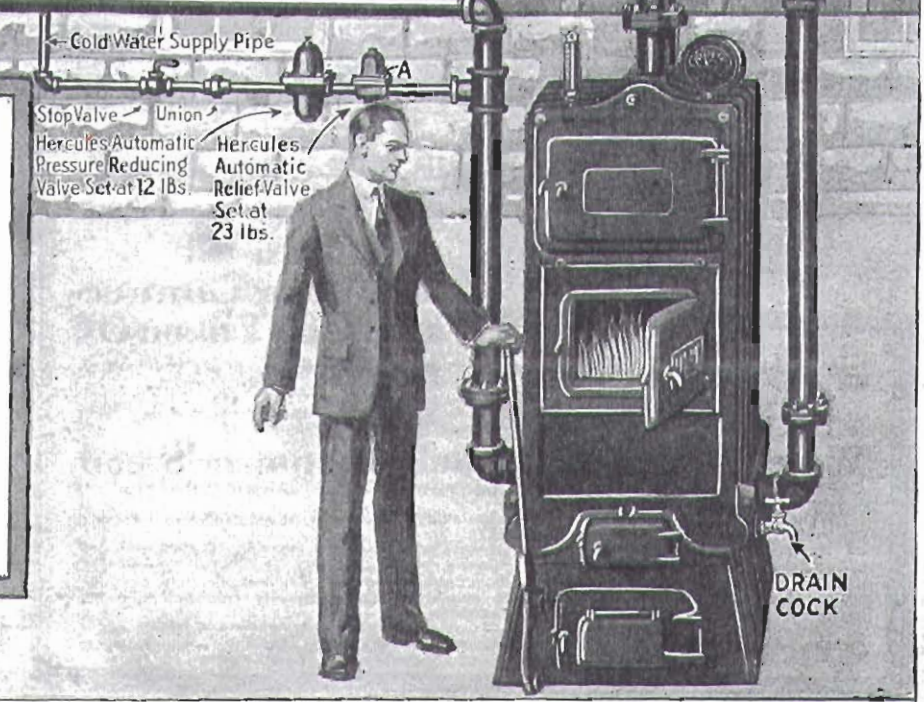
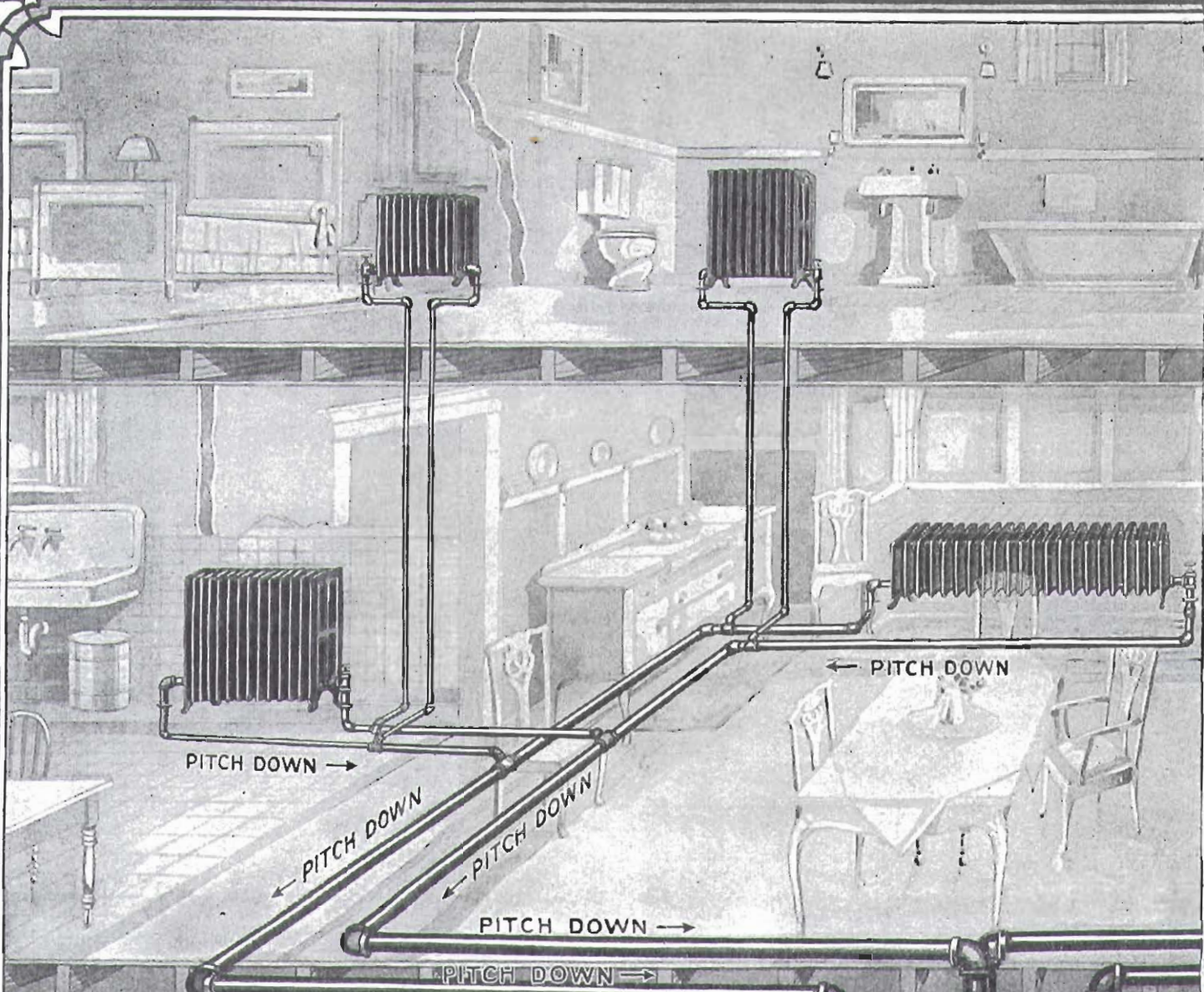


**Easy
Payment
Terms on
Complete
Heating
Systems.
Ten Months
to Pay**

You do not necessarily have to have city water pressure, or a water supply system of any kind, to enjoy the benefits of either our Hercules Steam or Hot Water Heating Systems. You can very easily feed water to the boiler by letting the steam pressure go down for a few minutes, and by unscrewing the brass safety valve you can add water with an ordinary bucket and funnel. A little water added once or twice a week is all that is required.

Water Travels in Same Direction as Steam

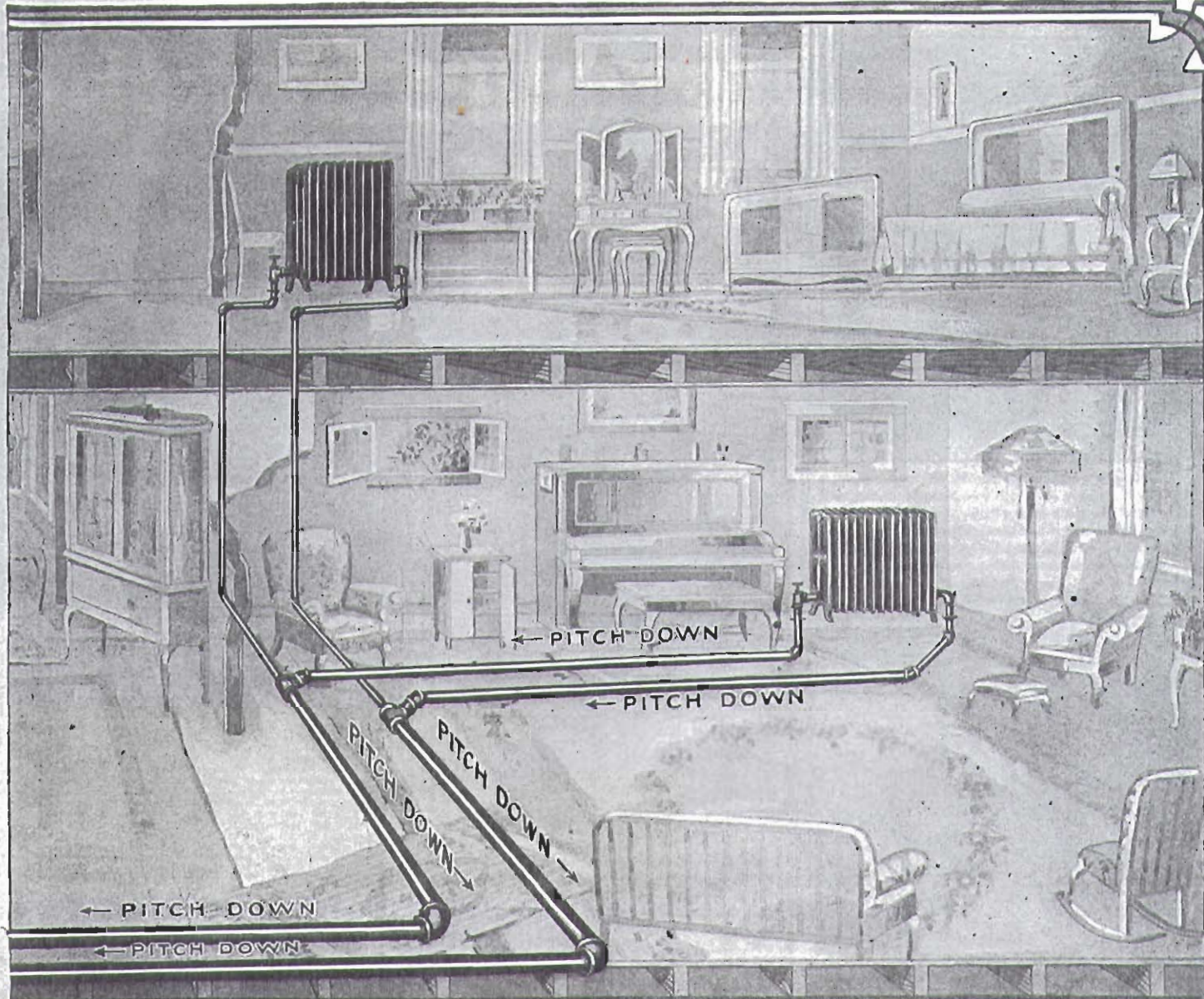
The basic principles embodied in the piping system illustrated above are carried out in all of our Hercules Steam Heating Systems. We call your particular attention to the fact that in this system the water in the large main pipe travels in the same direction as the steam. The large main is carried around the basement full size until the last radiator connection has been taken off, and the smaller sized water return pipe, which carries the water of condensation back to the boiler, is connected to the large main pipe with an eccentric reducer, so that complete drainage is assured. The result of all this is a smooth working system, free from noise and water hammering and perfect circulation to all the radiators. We feel confident that the great success of our Hercules Heating Systems is largely due to the close attention given to detail and the thoroughness with which they are designed. Every detail is carefully planned to insure a perfect and smooth working heating system.



**ROUND BOILER
FURNISHED IF YOU WISH**

Illustration of our Hercules Hot Water Heating System on this and the opposite page and the illustration of our Hercules Steam Heating System on pages 8 and 9 show our Hercules Square Type Boilers. If you prefer a round boiler to a square, we can furnish our Hercules Round Type Boiler which we will guarantee to be equally satisfactory.

Full description, illustrations and prices of our Hercules Round Type and Square Type Boilers will be found on pages 18 and 19. When writing for our estimate be sure to state whether round or square type boiler is preferred.



The Hercules Hot Water Heating System

Remarkably Economical. Unsurpassed for Residence Heating

The illustrations on these pages will give you a very clear idea of how our Hercules Hot Water Heating System operates. You do not necessarily have to have city water or water pressure of any kind. If you haven't water supplied under pressure in your building, be sure to tell us this and we will provide an expansion tank instead of our Hercules Automatic Relief and Pressure Reducing Feed Valve and we will arrange a suitable connection so that you can fill the system with an ordinary bucket at the expansion tank.

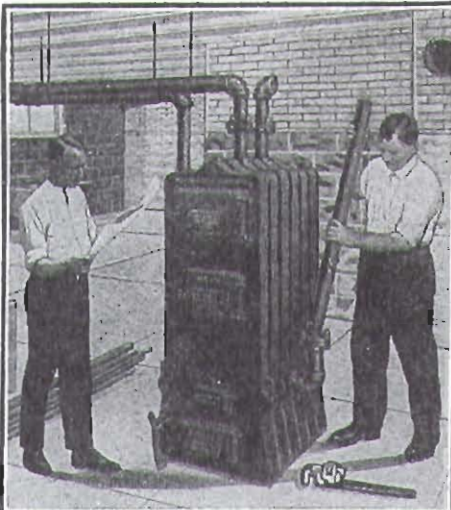
When the fire is started, the water in the boiler becomes heated. Hot water is lighter than cold water and, of course, immediately goes up to the top of the boiler and continues its course upward and out through the main pipes until it reaches the radiators, where it gives off its heat, and when it cools off it gets heavy again and drops down to the bottom of the radiator, and goes out the opposite

end of the radiator through the return pipe, continuing its course back down to the boiler, where it is heated again and rises back to the radiators. This process goes on continuously as long as there is any fire burning in the boiler. The water, it will be observed, simply serves as a heat carrier. It absorbs heat from the fire, carries it to the radiators, and as soon as it has delivered its heat, it immediately starts back to the boiler for more, repeating the process over and over.

It will be noticed that there is no water wasted. The same water is used over and over, and the only possible loss is the slight amount which evaporates from the expansion tank. After the system is once filled, you will only need to add a few bucketfuls in the course of an entire season. For information about our Hercules Automatic Relief and Pressure Reducing Feed Valve see page 24.

Hercules Systems

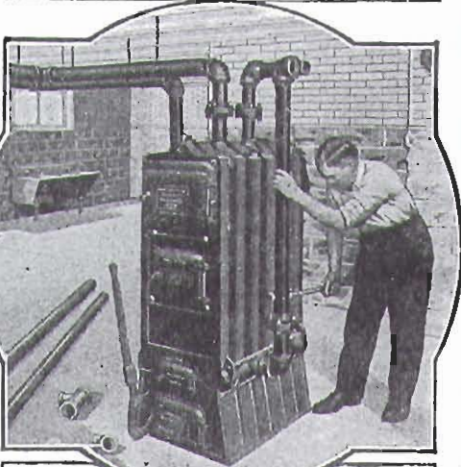
Any Handy Man Can Easily Install Any of Our Heating Systems by Following Our Simple Plans and Instructions



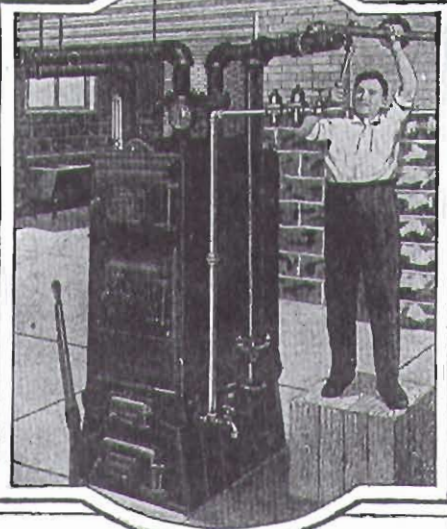
Here is another big reason why our customers find it so easy to install our Hercules Steam and Hot Water Heating Systems. The large main pipes are all ready cut to fit and threaded to correspond with the working plans. All you have to do is to screw them together with a pipe wrench.



By laying the body of the boiler across two boxes in the correct position, as illustrated above, a man and a boy can easily lift it upright into position on the base.



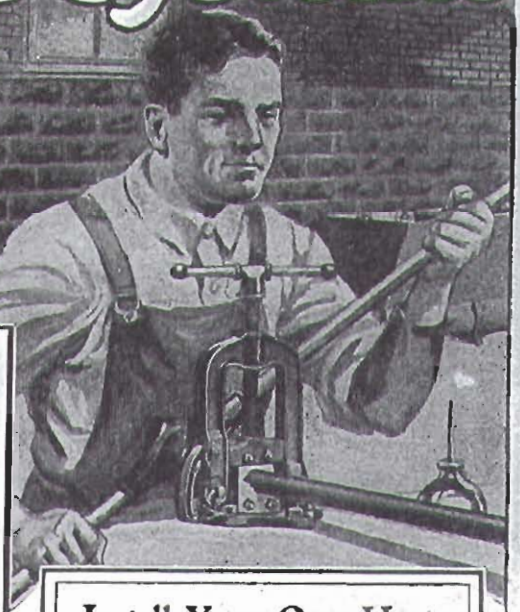
After the boiler is set up, the holes should be bored through the floor for the pipes leading to radiators. Then when you are connecting the mains you can tell just exactly where to place the tees. Our plans and instructions explain clearly just where to place tees and how to connect all pipes.



After the main pipes are in position, you can extend the branch pipes for the radiators. These should be cut to the correct length and threaded so that the elbow will turn up exactly under the hole which you have bored through the floor to connect with the radiator above. Branch pipes leading to radiators should pitch downward toward mains about 1 inch in 10 feet.



Bore the holes for the second floor radiators first. Then by dropping a plumb line you can tell just exactly where to bore through the first floor so that the upright pipes stand true and straight. Our plans indicate clearly the correct size and position for all upright pipes.



Install Your Own Heating System and Save Money

The great majority of our customers install their own heating systems. It is not nearly as difficult as most people imagine. It is really surprising how simple and easy the work becomes after the job is started. "Irresistibly interesting" is the way one customer put it when telling us about his experience in installing his own heating system. It amounts to nothing more than a little substantial exercise, and after the job is finished you will feel the better for it. One man and a boy can easily install any of our Hercules Heating Systems in a surprisingly short time. The big saving you can make well warrants your looking after the work yourself.

Experience Not Necessary

If you do not care to do the work, you should not have much difficulty in locating some handy man in your locality who is willing to do the work for you at a reasonable working wage. It does not require an experienced plumber or steamfitter by any means. Any man who can cut and thread ordinary iron pipe and who has a little mechanical ability can easily do this work by following our simple plans and instructions.



To bore holes for first floor radiators tighten up the radiator valve and the union elbow into the radiator. Place radiator in exact position wanted. Now mark exact center point under valve and elbow. Push radiator aside and bore through. By following this plan, the pipes will come up through floor exactly in right position to connect with radiator.

Easily Installed



Our Plans and Instructions Make It Easy

Our plans are drawn up in a simple manner so that you can easily understand them. In addition to our blueprint plans furnished with each heating system we send you a complete heating instruction book, in which we start right at the beginning and carry you through the entire job. Everything is explained in detail with numerous actual photographs showing every stage of the work so that anyone, even without previous experience can easily understand just how all of the various parts are assembled. Our long experience has enabled us to anticipate the possible difficulties and eliminate them.

We have systematized the work so well and simplified our Hercules Heating Systems to such an extent that it is almost like putting up a stove.

We Cut and Thread the Large Pipes

We cut and thread all the larger main pipes and all you have to do is screw them together as indicated on our plans. The only pipes you need to cut and thread are the small branch pipes and upright pipes leading to the radiators.



Simple as it is to install our Hercules Steam and Hot Water Heating Systems, it is even simpler to install our Pipe or Pipeless Warm Air Furnaces. It is really easier than assembling a stove, because the parts are lighter and easier handled. Our furnace castings are made from accurate patterns and the parts fit so nicely that it is a pleasure to assemble them.



On all of our complete Hercules Warm Air Heating Systems we cut out the openings in the bonnet or top of the furnace for you, and we set in the collars ready to connect the pipes exactly according to our plans and instructions.



Notice how the fire pots of all our furnaces are made in two parts. This allows separate expansion and contraction of the upper and lower parts and prevents cracking. They are connected by deep tongue and groove gastight cup joints.



Sufficient special radiator paint enamel of ivory or gray color, as you may prefer, is included with every complete Hercules Steam or Hot Water Heating System when mentioned in our specifications so that you can decorate all radiators and upright pipes exposed in your rooms.

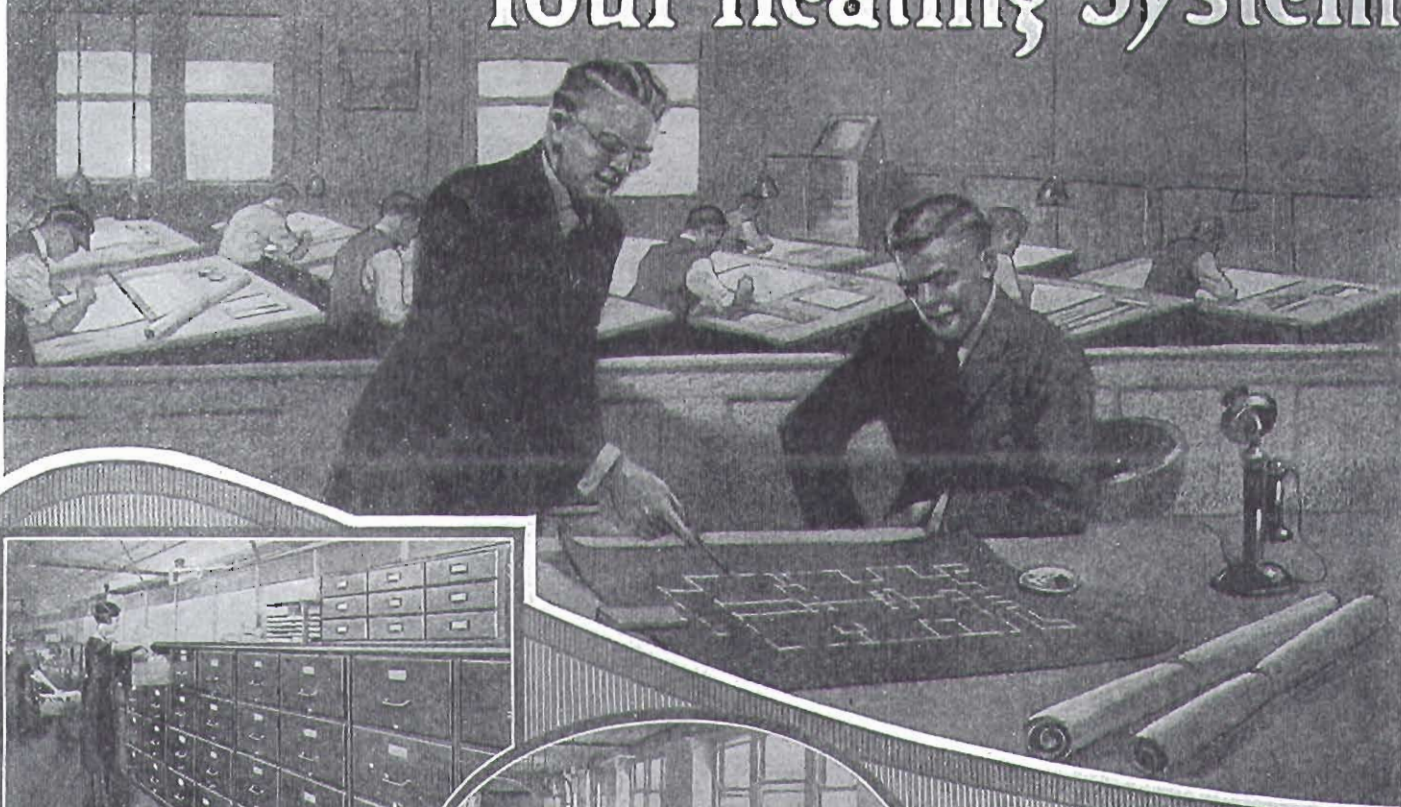


An expansion tank is necessary only when you have no running water in your building. The expansion tank on a Hercules Hot Water Heating System should be placed higher than any radiator of the plant. It may be placed either in a convenient closet or in the attic. Our plans and instructions explain all this clearly.

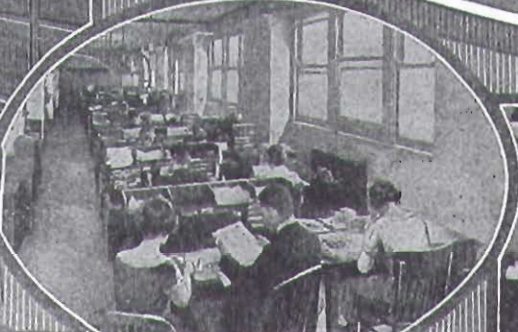


It will really surprise you what a big saving you will make in your fuel bill if you cover your boiler and all exposed pipes in your basement. The covering pays for itself in one or two seasons. We quote our heating systems with and without covering, but strongly recommend that covering be used. The work is easy and so interesting that it is really a pleasure.

Your Heating System



The Filing Section in our Plumbing and Heating Department. When your estimate is completed and mailed to you, a carbon copy is kept with your letter and is carefully filed here for reference when your order is received.

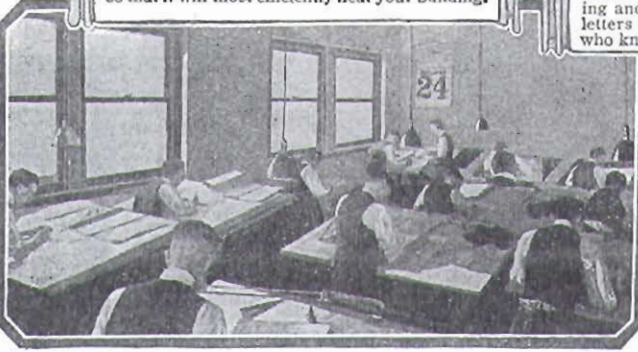


The Correspondence Section in our Plumbing and Heating Department. Hundreds of letters are received daily from our customers in all parts of the country asking advice and information on plumbing and heating problems. These letters are answered here by men who know.



Estimating Section in our Plumbing and Heating Department. Hercules Heating Systems are estimated with scientific accuracy; glass surface, exposed wall surface, etc., are carefully considered and provided for according to accepted engineering formulas.

A Corner of the Engineering and Drafting Section in our Plumbing and Heating Department. Here is where the working plans of your heating system are carefully drawn up so that it will most efficiently heat your building.



Order Checking Section in our Plumbing and Heating Department. After all parts of your order have been assembled, it is carefully checked here by men who are thoroughly experienced in this merchandise before being packed for shipment, so as to correct any possible errors.



You Benefit by Our Accumulated Experience of Over Twenty-Five Years

Experience is after all the best teacher. Scientific facts and figures are important and necessary but actual experience is what adds the practical touch which carries most things through to ultimate success.

From the very nature and magnitude of our business, dealing as we do direct with the consumer, there is little doubt that we have estimated and planned more complete modern systems to meet all sorts of various conditions than any other single concern in the country.

When you purchase a Hercules Heating System from us, you get the benefit of this vast accumulated experience of over twenty-five years.

Planned by Experts

Reception and Sample Display Room in our Plumbing and Heating Department. Nothing pleases us more than to personally demonstrate to our customers the merits of our Hercules Heating Systems. When in the city be sure to come and see us.

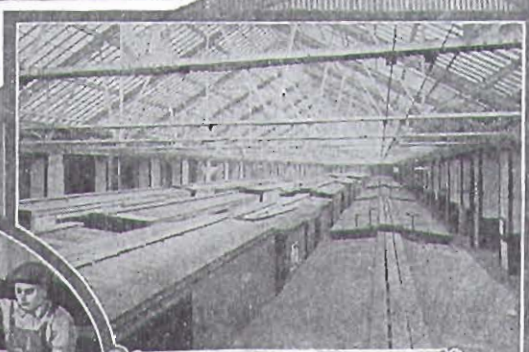
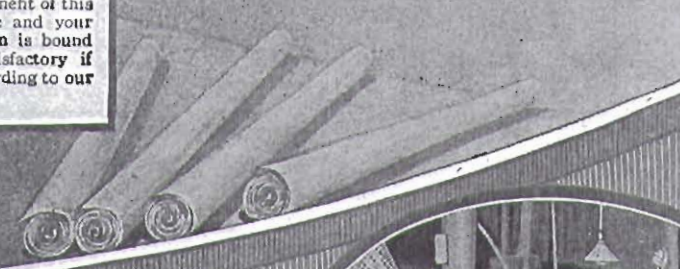


The great success of our Hercules Heating Systems is due in a very large measure to the accuracy and thoroughness with which they are planned.

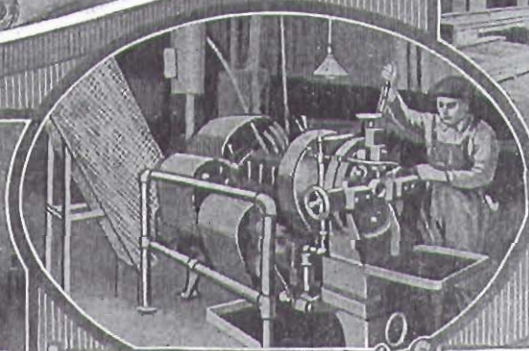
Few buildings are exactly alike; each individual case presents special problems which must be worked out correctly.

Men of highly specialized training and wide practical experience make up the big organization which stands behind the Hercules.

When you order a Hercules Heating System, you get the benefit of this expert service and your heating system is bound to prove satisfactory if installed according to our plans.

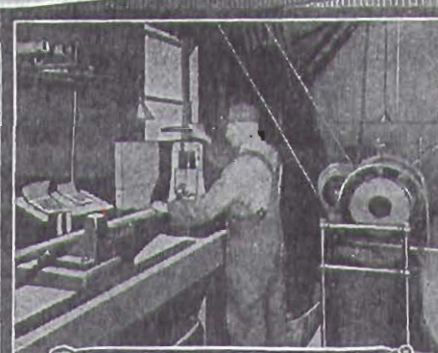


General Freight Loading Sheds. Here is where merchandise on all orders from all departments is loaded in cars for shipment. These sheds are entirely glass covered. From 120 to 125 cars are loaded here for shipment each day.



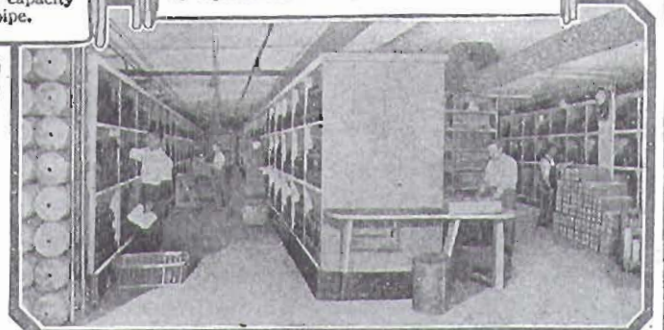
One of the Big Pipe Threading Machines in Our Plumbing and Heating Department. This machine threads and reams the pipe in one operation and has capacity for working up to 6-inch pipe.

Pipe Fittings Section in the Stock Room of Our Plumbing and Heating Department. After the bill of material is made up by our engineers from the working plans, it is sent here and your order is carefully assembled by experienced stock men.



Cutting Pipe in Our Plumbing and Heating Department. We cut and thread the larger size pipe for you to correspond with the working plans. All you have to do is screw them together with a pipe wrench.

Packing Section in Our Plumbing and Heating Department. After your order has been assembled and checked, it is packed for shipment here with the utmost care so as to assure the material reaching you in safe and sound condition.



A Remarkable Growth Founded on Satisfactory Service

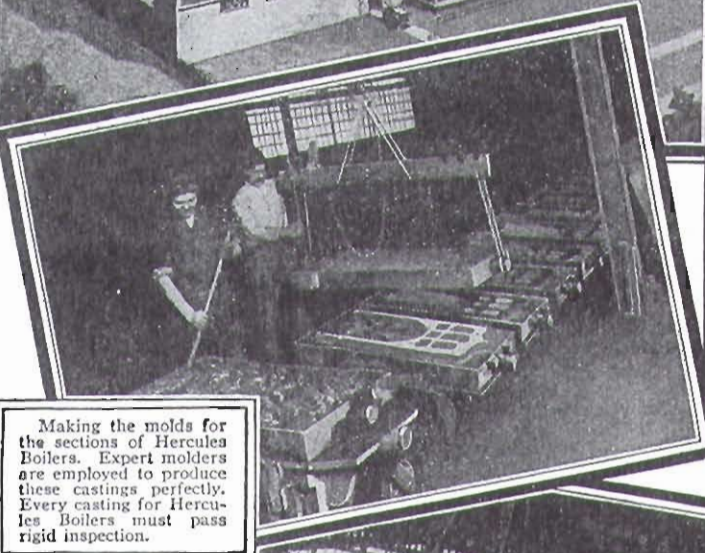
With the exception of the photographic view of our mammoth freight loading shed which serves all departments, the pictures on these pages are actual photographic reproductions of various sections in our Plumbing and Heating Department, and the entire energy of all these various units in our big organization is devoted exclusively to the handling of our plumbing and heating business.

We know of no better proof we can give you of the merits of our merchandise and satisfactory service rendered to our customers than the remarkable growth of this department from a very humble beginning to its present large proportions.

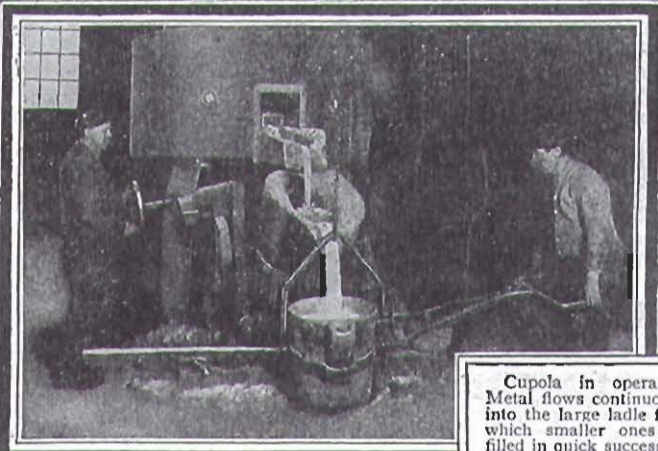


Excellent Facilities

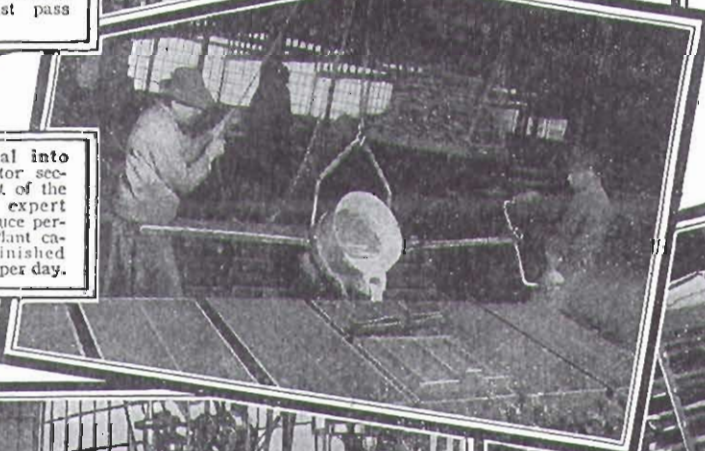
Actual photographic birdseye view of the factory where Hercules Boilers, and Radiators are made. One of the most modern and completely equipped plants in the country.



Making the molds for the sections of Hercules Boilers. Expert molders are employed to produce these castings perfectly. Every casting for Hercules Boilers must pass rigid inspection.



Cupola in operation. Metal flows continuously into the large ladle from which smaller ones are filled in quick succession. Iron used is of high quality to insure strong, perfect castings.



Pouring metal into molds for radiator sections. This part of the work requires expert handling to produce perfect castings. Plant capacity, 3,000 finished radiator sections per day.

Continuous Operation Means Economical Production

Heating apparatus is a decidedly seasonable line of merchandise.

While we strongly advise placing orders for heating systems as early in the season as possible, still the great rush of orders comes in during the last few months of the year.

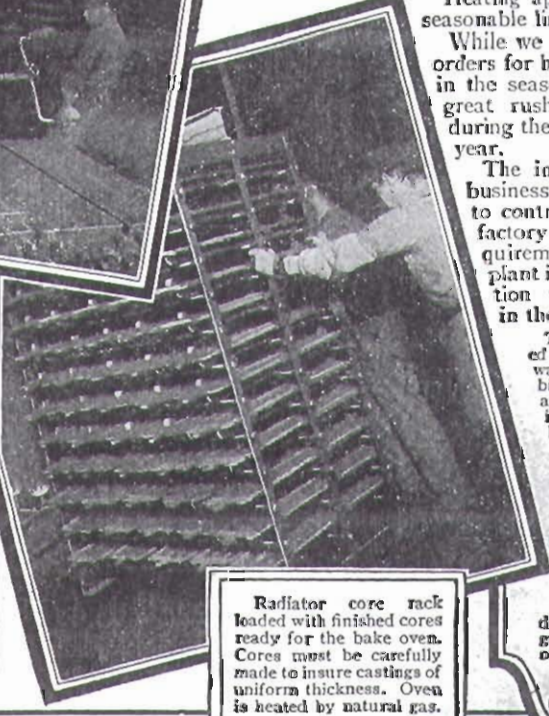
The immense volume of our business places us in position to contract in advance with the factory for our entire year's requirements, and the entire plant is kept in normal operation throughout every day in the year.

The very same plan is followed in the production of our warm air furnaces, and as this big stock of boilers, radiators and furnaces is accumulated, it is placed in storage in the big warehouses adjoining the factories so that we will be ready for the big Fall rush.

The great economy of this plan is self evident. The factory is able to maintain an efficient organization the year around, and there is no big overhead expense incurred by operating a large plant at only fractional capacity during the dull season. You get the benefit of all this in our low prices.

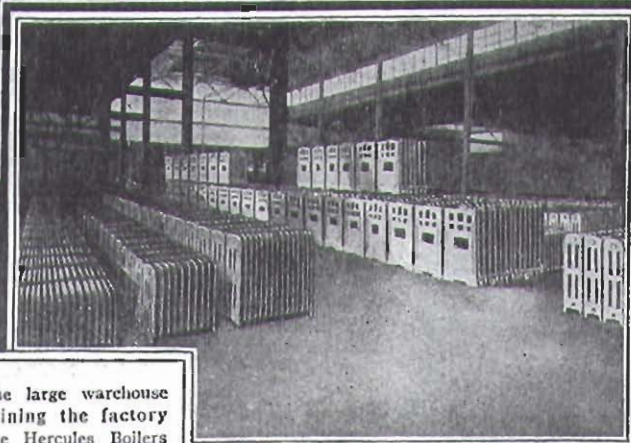
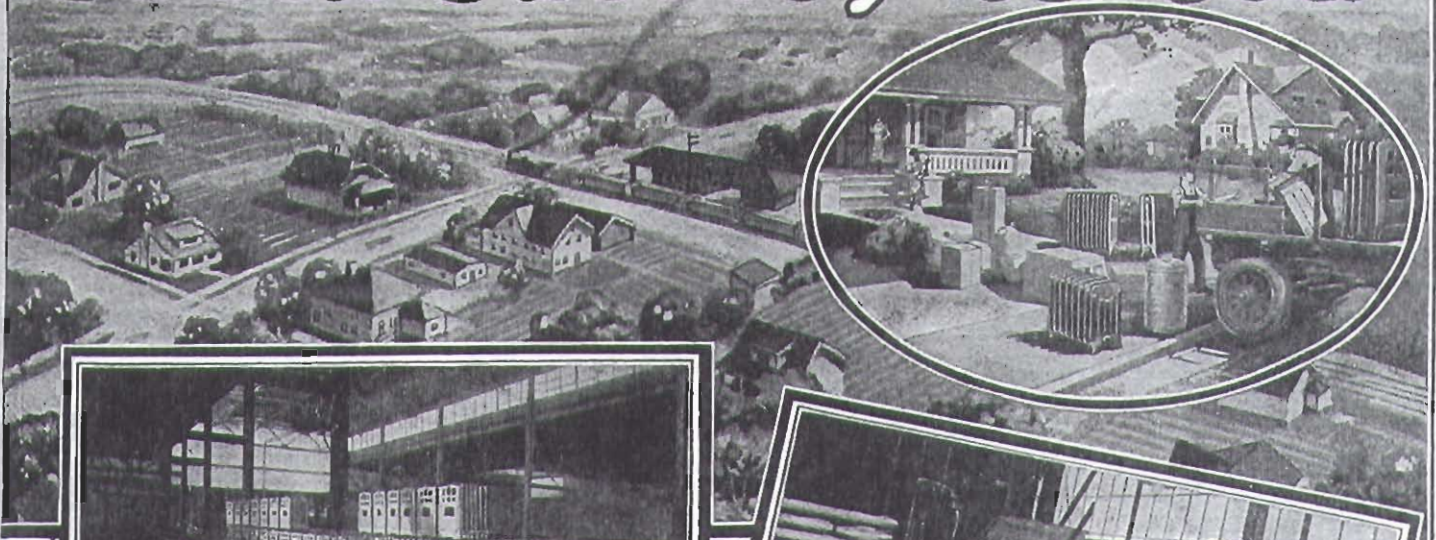


Tapping out the radiator end sections to receive the valve connections. Tappings must be made straight and true. Our radiator sections are accurately tapped and have clean sharp threads.

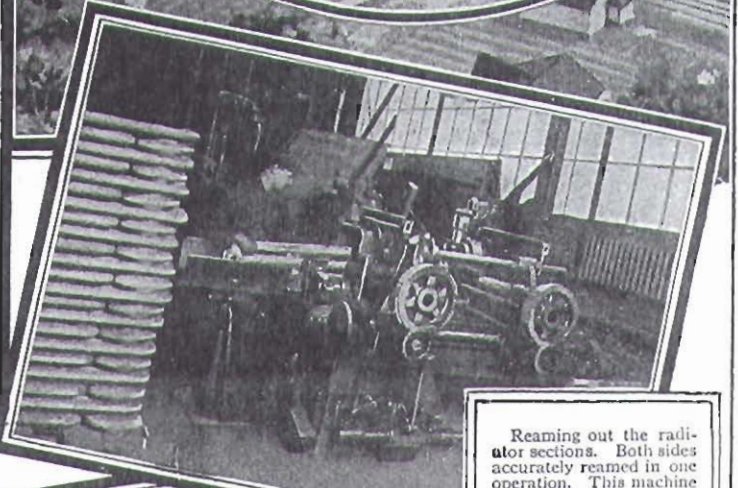


Radiator core rack loaded with finished cores ready for the bake oven. Cores must be carefully made to insure castings of uniform thickness. Oven is heated by natural gas.

From Factory to You



The large warehouse adjoining the factory where Hercules Boilers and Radiators are stored for the big fall rush.



Reaming out the radiator sections. Both sides accurately reamed in one operation. This machine is a big labor saver and helps to cut the cost.

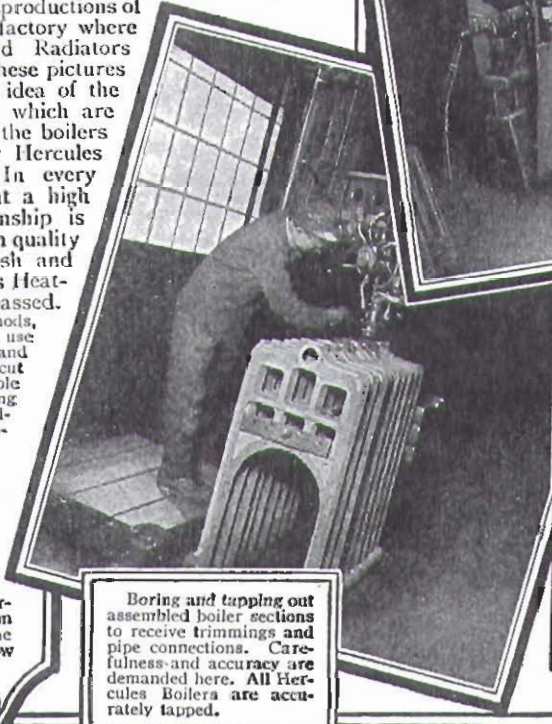
Hercules Boilers, Radiators and Furnaces Shipped Direct From Factory to You

The pictures on these pages are actual photographic reproductions of various views at the factory where Hercules Boilers and Radiators are manufactured. These pictures will give you a good idea of the diversified operations which are necessary to produce the boilers and radiators of our Hercules Heating Systems. In every operation at this plant a high standard of workmanship is maintained and in high quality of workmanship, finish and material our Hercules Heating Systems are unsurpassed. The most modern methods, tools and machinery are in use throughout this factory, and the cost of production is cut down to the lowest possible limit and without sacrificing at any point the high standard of quality that we require in this material.

Another of the big contributing factors in our ability to quote such low prices on our Hercules Heating Systems is the fact that all unnecessary handling and freight charges are eliminated. Hercules Boilers, Radiators and Warm Air Furnaces are shipped direct from factory to you and you get the benefit of this in our low prices.



Testing out the radiator sections. Each section is individually tested before assembling and retested in the finished radiator. Radiators must be perfect to pass inspection.



Boring and tapping out assembled boiler sections to receive trimmings and pipe connections. Carefulness and accuracy are demanded here. All Hercules Boilers are accurately tapped.



Cores for molding radiator sections are made from sand and linseed oil and must be baked hard before using. Cores are placed in molds to make castings hollow.

Hercules Cast Iron Sectional Boilers

Round or Square

Illustrations on this and the opposite page show our Hercules Round and Square Boilers for steam or hot water heating. From a standpoint of heating efficiency a choice between these boilers would be hard to make. That is largely a matter of opinion. Some people prefer a round boiler, others prefer the square. Nevertheless, whichever boiler you select, we believe we are offering you the best. The fundamental principle of these boilers is right. Notice the large amount of heating surface directly over the fire. The boiler is the heart of your heating system. For many years it will be burning coal economically or wasting it. A heating system for your home is an investment that you will make probably once in a lifetime. An inefficient boiler on your heating system is a poor investment at any price. With a Hercules Boiler in your home you will get the utmost heat out of the fuel you burn.

Hercules Cast Iron Round Boilers

Scientifically designed for greatest heating efficiency, our Hercules Cast Iron Round Boilers shown on this page are unexcelled for economical home heating. These Hercules Boilers are equal to the best on the market in workmanship, finish and material. They are built to a very high quality standard, the grates, door, castings and other parts being of heavy construction so that the boiler, with ordinary care, will last a lifetime. All doors are ground to a very accurate fit, reducing air leakage to a minimum. Ample cleanout openings have been provided, making the boiler easily accessible for cleaning at all points. There is a liberal size feed door and a very deep fire pot, which makes this one of the most economical home heating boilers on the market. The grate bars are of the rocking type. The entire grate can be easily shaken by moving the long lever handle at the front of the boiler backward and forward. Each boiler has tappings to receive a coil for heating water for domestic purposes.

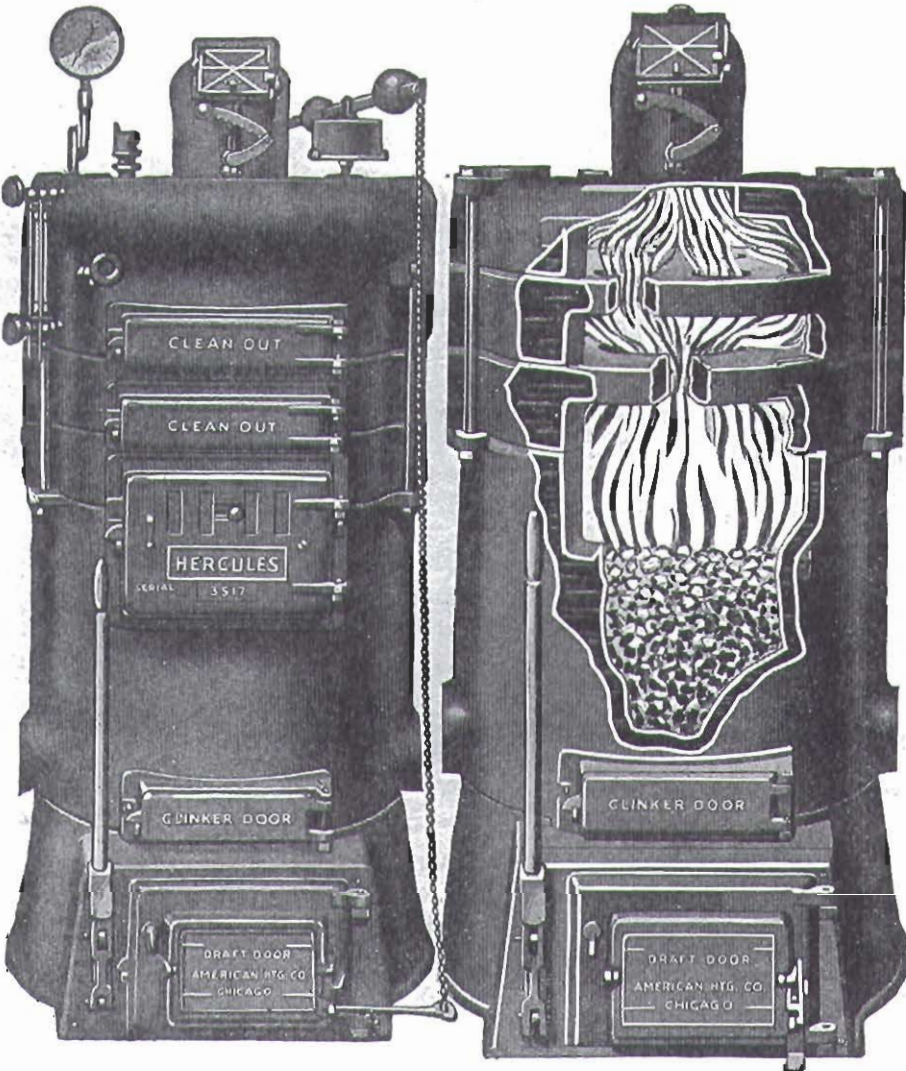
The illustrations on this page show boilers having three sections above the fire pot, depending, of course, upon the heating capacity required.

We offer you these boilers with the assurance that they represent the maximum in fuel economy and home comfort.

When writing for our estimate be sure to state whether round or square boiler is preferred. Where no preference is stated square boiler will be figured on estimates.

Both Cash and Easy Payment Prices are given below. Write for special terms if you wish to purchase on easy payments.

The prices, as given below on the steam boilers, include steam trimmings complete. Prices on hot water boilers are for boilers only without fittings. Firing tools include the hoe, poker, rake and flue brush with handle furnished with each boiler.



Please Read Information on Opposite Page Regarding Boiler Ratings

Hercules Cast Iron Steam and Hot Water Home Heating Round Boilers

Shipped from factory in WESTERN NEW YORK. Prices subject to market changes.

Size of Grate	Sections Above Fire Pot	Size Tappings, Feed and Return	Size of Smoke Collar	Height to Feed Outlet, Inches	HOT WATER BOILERS				STEAM BOILERS			
					Rated Capacity, Sq. Ft.	Shipping Weight, Lbs.	42PK3978 3/4		Rated Capacity, Sq. Ft.	Shipping Weight, Lbs.	42PK3976 3/4	
							Cash Price	Easy Payment Price			Cash Price	Easy Payment Price
17-Inch Diameter	2	2 1/2 in.	7 in.	42 1/2	550	625	\$ 52.50	\$ 58.00	350	725	\$ 60.00	\$ 66.00
20-Inch Diameter	2	2 1/2 in.	7 in.	47 1/2	650	730	67.50	74.50	400	830	75.00	82.50
23-Inch Diameter	2	2 1/2 in.	8 in.	45	800	745	70.50	77.50	500	850	82.50	91.00
26-Inch Diameter	3	3 in.	8 in.	50	900	850	82.50	91.00	550	950	94.50	104.00
29-Inch Diameter	2	3 in.	8 in.	45	1100	910	97.50	107.50	675	1050	115.50	127.00
32-Inch Diameter	2	3 in.	10 in.	45	1450	1090	112.50	124.00	900	1310	139.50	153.50
35-Inch Diameter	3	3 in.	10 in.	50	1550	1230	135.00	148.50	1000	1350	162.00	176.50
38-Inch Diameter	2	4 in.	10 in.	46	1900	1300	142.50	157.00	1150	1500	177.00	195.00
42-Inch Diameter	3	4 in.	10 in.	51	2050	1490	165.00	181.50	1225	1680	199.50	219.50

Note—All above boilers have two openings in the back section through which a coil may be connected to heat water for domestic purposes. 42PK1678 3/4—Pipe Coil to fit any of above boilers. Shipping weight, 16 pounds. For Galvanized Smoke Pipe and Elbows see page 29. \$1.85

for Greatest Winter Comfort

A Perfect Home Heating Boiler in Every Sense of the Word

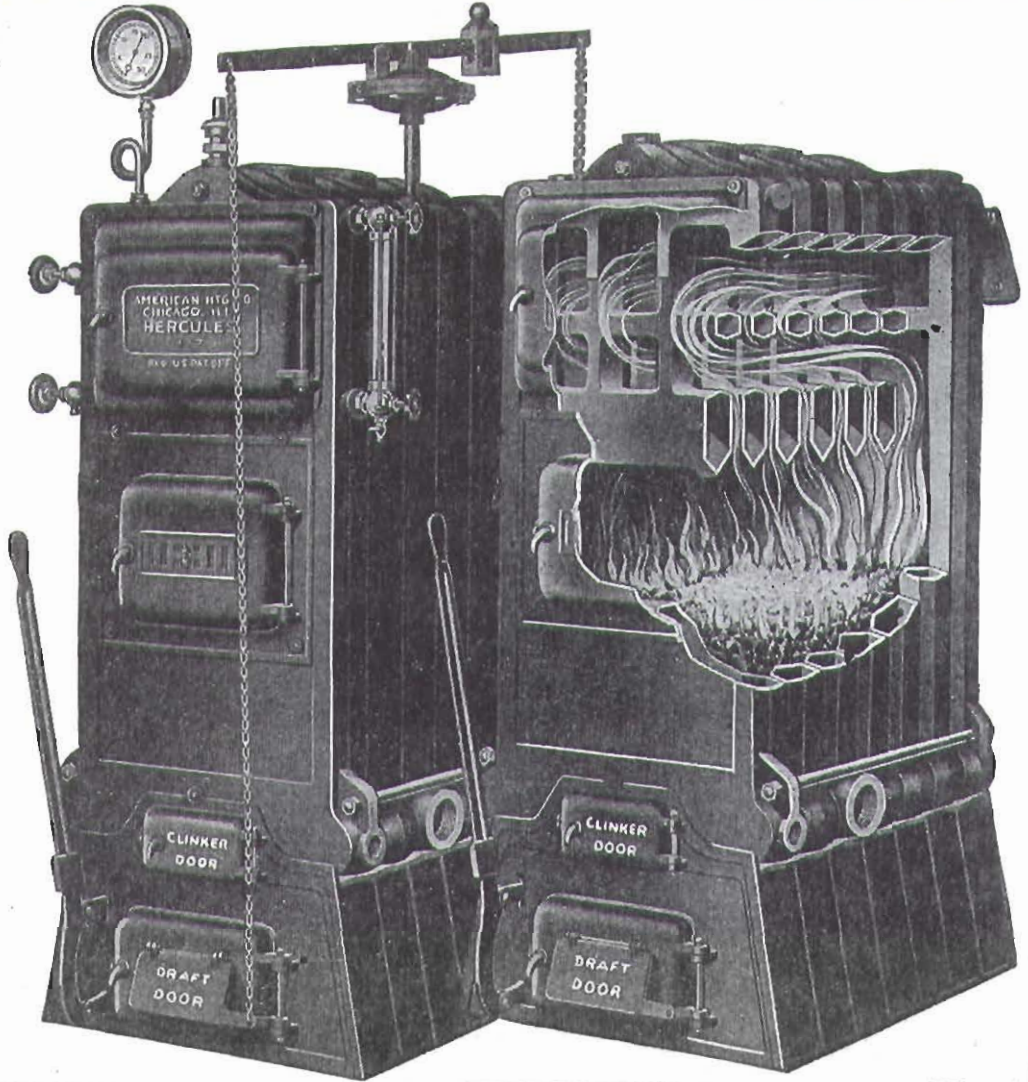
The large illustration on this page shows our Hercules 17-inch fire pot boiler fully equipped with steam trimmings as furnished for steam heating. The same boiler is used for hot water heating except that the steam trimmings are not furnished. Illustration on right hand side shows internal flue construction. Note the enormous heating surface and deep fire pot.

Our Hercules Cast Iron Boiler is a perfect home heating boiler in every sense of the word. It is quickly responsive to firing, it holds the fire for a long time, it burns the fuel effectively and economically, it is easy to clean the flues and keep them free from soot deposits, and it is easy to operate.

The large fuel door permits you to throw in large chunks of wood or coal, and the high ash pit permits free circulation of air under the grate bars.

In workmanship, finish and material these boilers will measure up to the highest standard. Well made and well designed, it is a boiler that you may well be proud to have in your home.

There are many thousands of our Hercules Cast Iron Boilers installed and giving satisfactory service in all parts of the country, and the very best proof we can give you of their durability and dependability and economical performance is the hundreds of testimonial letters we receive each year from our customers who have them installed.



Showing Smoke Box Extension With Cast Iron Damper and Draft Door.

Boiler Ratings

All our Hercules Boilers are rated according to the regular standard as adopted by boiler manufacturers throughout the country. In these ratings no allowance has been made for heat losses from exposed mains and branch pipes, fittings, etc. In selecting a boiler add 100 per cent to the amount of radiation you have to supply and select a boiler rated accordingly; for instance, if you have 400 square feet of radiation to heat, you should have a boiler rated 800 square feet at least. We strongly advocate ample boiler capacity on any heating system. It is always far better to have a boiler a little over size than too small.

Hercules Cast Iron Steam and Hot Water Home Heating Square Boilers With 17-Inch Fire Pot

Boilers Nos. 517 and 617 each have two 2½-inch flow tappings and two 2½-inch return tappings for pipe connections, boilers Nos. 717 and 817 have three 2½-inch flow and three 2½-inch return tappings for pipe connections.

Shipped from factory in WESTERN NEW YORK. Prices subject to market changes. Both Cash and Easy Payment Prices are given below. Write for special terms if you wish to purchase on easy payments.

No.	Heating Capacity, Sq. Ft. Hot Water Radiation	Heating Capacity, Sq. Ft. of Steam Radiation	Size of Fire Pot, Inches	Size of Smoke Pipe, Inches	Floor Space, Including Smoke Box, Inches	Height, Over All, Inches	HOT WATER BOILERS			STEAM BOILERS			
							Shipping Weight, Pounds	42PK3973½		Height to Water Line, Inches	Shipping Weight, Pounds	42PK3972½	
								Hot Water				Steam	
Cash Price	Easy Payment Price	Cash Price	Easy Payment Price										
517	880	560	17x16½	9	26x28	58	900	\$ 81.75	\$ 90.00	48	940	\$ 96.75	\$106.50
617	1,080	650	17x20½	9	26x32	58	1,050	94.85	104.50	48	1,090	109.85	121.00
717	1,280	760	17x25	9	26x36	58	1,190	107.95	119.00	48	1,230	122.95	135.00
817	1,480	870	17x29	9	26x40	58	1,350	122.35	134.50	48	1,400	137.35	151.50

Note—All above boilers have two openings in the back section through which a coil may be connected to heat water for domestic purposes.

42PK1677½—Pipe Coil to fit any of above boilers. Shipping weight, 10 pounds\$1.85
For Galvanized Smoke Pipe and Elbows see page 29

Hercules Extra Large Series



These Boilers Have Remarkable Heating Efficiency

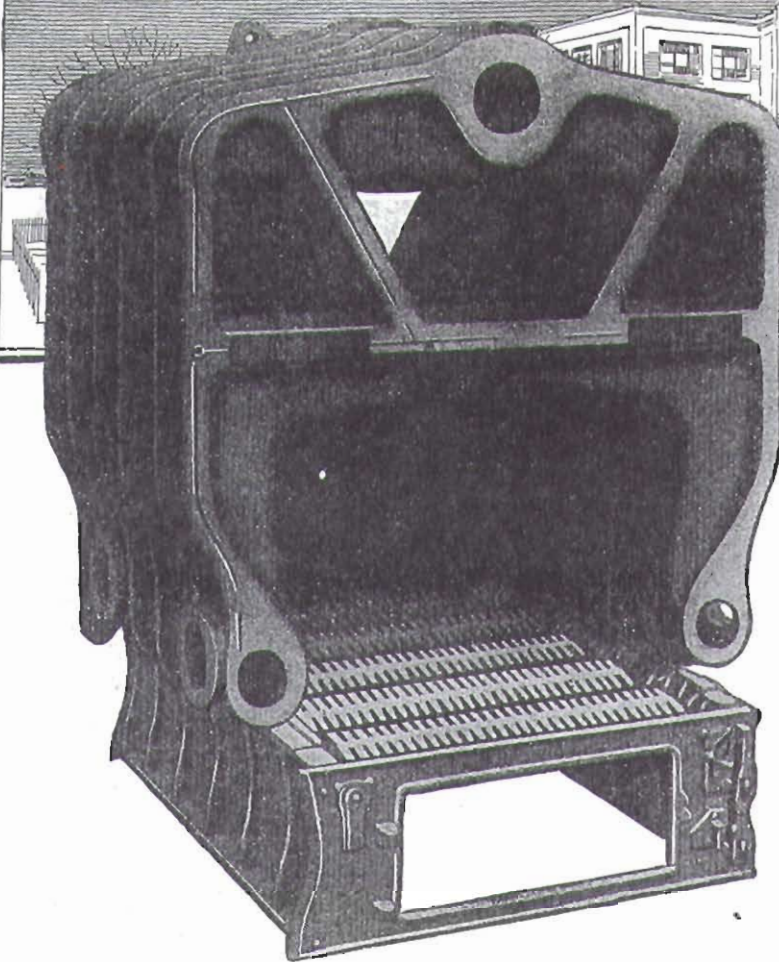
Illustrations on this and the opposite page show the construction of our Hercules Large Series Cast Iron Boilers for steam and hot water heating.

For large residences, churches, schools, etc., or any building requiring a boiler of large capacity, these boilers are unexcelled.

The same boiler is furnished for both steam and hot water heating, the only difference being that when ordered for steam heating a complete set of steam trimmings, such as safety valve, steam and water gauges, damper regulator, etc., are furnished, while these steam trimmings are omitted when boiler is ordered for hot water heating.

These boilers are shipped knocked down so that they can be taken through the narrowest basement doorway. It is a very simple matter to assemble the sections on the job, as each section is drawn up with separate bolts.

The sections are interconnected at three points with tapered push nipples. No screw threads or gaskets used in making the connections between the sections.



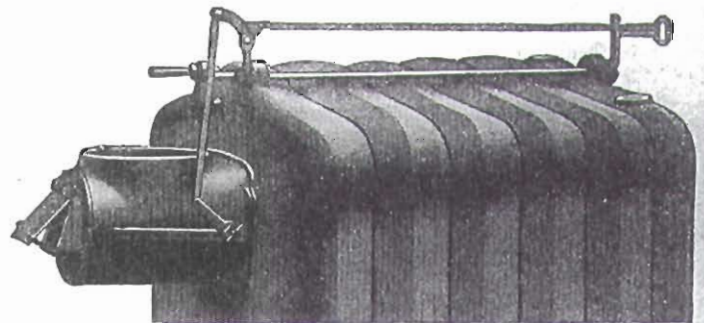
See Those Deep Overhanging Water Spaces, Located Directly Above the Fire

The above illustration shows a sectional view of the internal construction of our Hercules Large Series Cast Iron Boilers, quoted on this and the opposite page, for steam and hot water heating.

Notice the enormous amount of heating surface which this boiler contains! See those deep, overhanging water spaces, located directly above the fire!

Notice that the fire travels in this boiler three times its entire length before escaping into the chimney. First it goes to the rear of the fire box, where it turns up into the outside row of flue spaces and comes forward to the front of the boiler. Then it turns into the center row of flue spaces and goes back again the full length of the boiler before going out through the smoke pipe.

This illustration shows clearly the enormous amount of heating surface contained in this boiler. From the standpoint of heating efficiency and fuel economy, it is unexcelled by any boiler manufactured.



The above illustration shows the convenient damper operating mechanism with which these boilers are equipped. This arrangement permits you to control your smoke pipe damper from the front of your boiler. It assures positive and accurate adjustment of the position of your smoke pipe damper for maximum fuel economy.

Hercules Large Series Cast Iron Boilers for Steam Heating Prices and Dimensions

Please Read Explanation Regarding Boiler Ratings on Page 19 Before Ordering

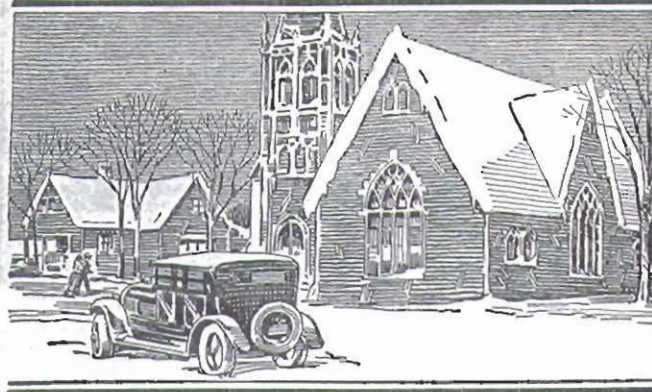
Shipped From Factory in Central Michigan, or Warehouse in Chicago, Ill., or Hoboken, N. J., whichever is nearest you
Each Boiler Has Two 4-Inch Flow and Two 4-Inch Return Tappings. Prices subject to Market Changes

Catalog No.	Boiler No.	Number of Sections	Height to Top of Boiler, Inches	Height to Water Line, Inches	Diameter of Smoke Pipe, Inches	Size of Grate, Inches	Capacity, Sq. Ft. of Steam Radiation	Shipping Weight, Pounds	Cash Price
42PK4025 $\frac{1}{3}$	S-256	6	53	45	10	22x37	1,200	2,830	\$219.00
42PK4026 $\frac{1}{3}$	S-257	7	53	45	10	22x44	1,400	3,180	249.75
42PK4027 $\frac{1}{3}$	S-258	8	53	45	10	22x51	1,600	3,530	267.00

All above boilers are tapped for hot water coil, so that coil may be inserted in fire box of boiler to heat water for domestic purposes.
42PK1684—Pipe Coil, to fit any of above boilers for heating water for domestic purposes. (Shipping weight, 12 pounds).....\$2.00

For Galvanized Smoke Pipe and Elbows see page 29

Steam and Hot Water Boilers



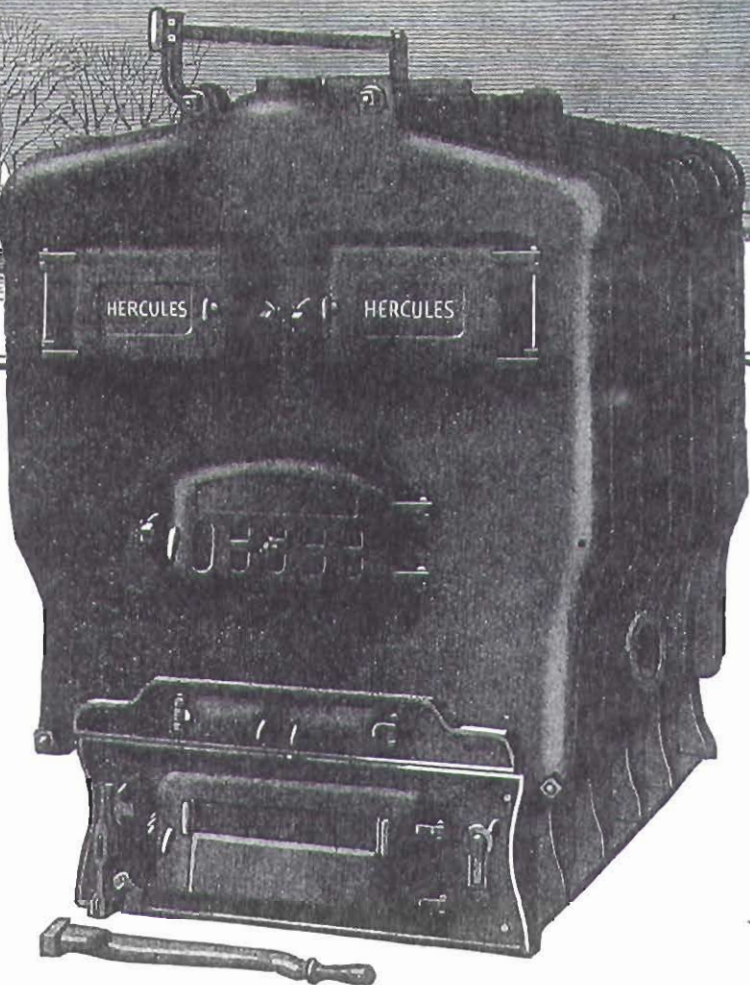
Large Straightway Flue Spaces Make the Boiler Easy to Clean

Accessibility for cleaning is a feature of paramount importance on any heating boiler.

See the illustration on the opposite page. Notice those large, straightway flue passages which make the operation of cleaning this boiler a simple one indeed. Opening the two large flue doors on the front of the boiler gives immediate access to all of these flue passages, so that all soot that may accumulate can be readily brushed down into the fire box.

The overhanging water spaces, which have deep grooves between them, as shown in illustration on opposite page, directly over the fire, are practically self cleaning, as the intense heat from the fire keeps any deposits of soot from accumulating on these surfaces. It only requires a few minutes' time to thoroughly brush out and clean the flues of this boiler.

This is just another reason why our Hercules Large Series Steam and Hot Water Heating Boiler ranks so high in fuel economy and heating efficiency. It is scientifically designed to promote most efficient circulation of the water through the water tubes, and these tubes and water spaces are so placed that maximum results and heating efficiency are obtained.



Heavily Constructed Rocking Grate Bars

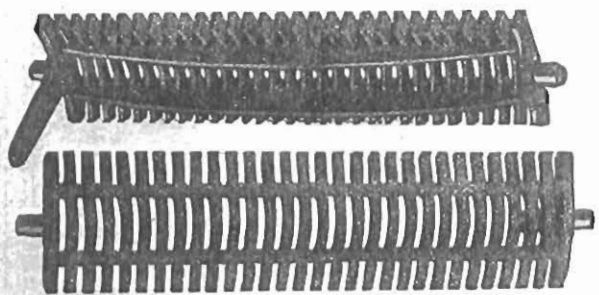
In quality of material and fine workmanship this boiler is unexcelled by any boiler manufactured. The castings are heavily made, providing ample strength wherever needed. It is a strictly high grade boiler, well made throughout.

The grate bars are of the rocking type, controlled by a shaking hand lever which fits on to the projecting shanks, as shown at the front of the boiler in the above illustration. The entire grate bed of the fire can be shaken by simply moving this shaker lever backward and forward.

The grates are of heavy construction, designed for the greatest durability under most severe service conditions.

The clinker door, or slice door, located directly above the ashpit door on the front of the boiler, permits the removing of clinkers without spoiling the fire.

We recommend our Hercules Large Series Cast Iron Boilers with the assurance that they will give you highly satisfactory service for either steam or hot water heating.



The above illustrations show the construction of the cast iron rocking grate bars furnished with these boilers. Note the double bridged, arched reinforcing beneath the ridges of the grate; also the large number of free air spaces, assuring efficient distribution of the draft over the entire grate surface.

Hercules Large Series Cast Iron Boilers for Hot Water Heating Prices and Dimensions

Please Read Explanation Regarding Boiler Ratings on Page 19 Before Ordering

Shipped from Factory in Central Michigan or Warehouse in Chicago or Hoboken, N. J., Whichever is Nearest You

Each Boiler Has Two 4-Inch Flow and Two 4-Inch Return Tappings. Prices Subject to Market Changes

Catalog No.	Boiler No.	Number of Sections	Height to Top of Boiler, Inches	Diameter of Smoke Pipe, Inches	Size of Grate, Inches	Capacity, Sq. Ft. of Hot Water Radiation	Shipping Weight, Pounds	Cash Price
42PK4028 $\frac{1}{2}$	W-256	6	53	10	22x37	1,700	2,800	\$204.00
42PK4029 $\frac{1}{2}$	W-257	7	53	10	22x44	2,100	3,150	234.75
42PK4030 $\frac{1}{2}$	W-258	8	53	10	22x51	2,700	3,500	252.00

All above boilers are tapped for hot water coil, so that coil may be inserted in fire box of boiler to heat water for domestic purposes.
42PK1684—Pipe Coil, to fit any of above boilers for heating water for domestic purposes. (Shipping weight, 12 pounds.).....\$2.00

For Galvanized Smoke Pipe and Elbows see page 29

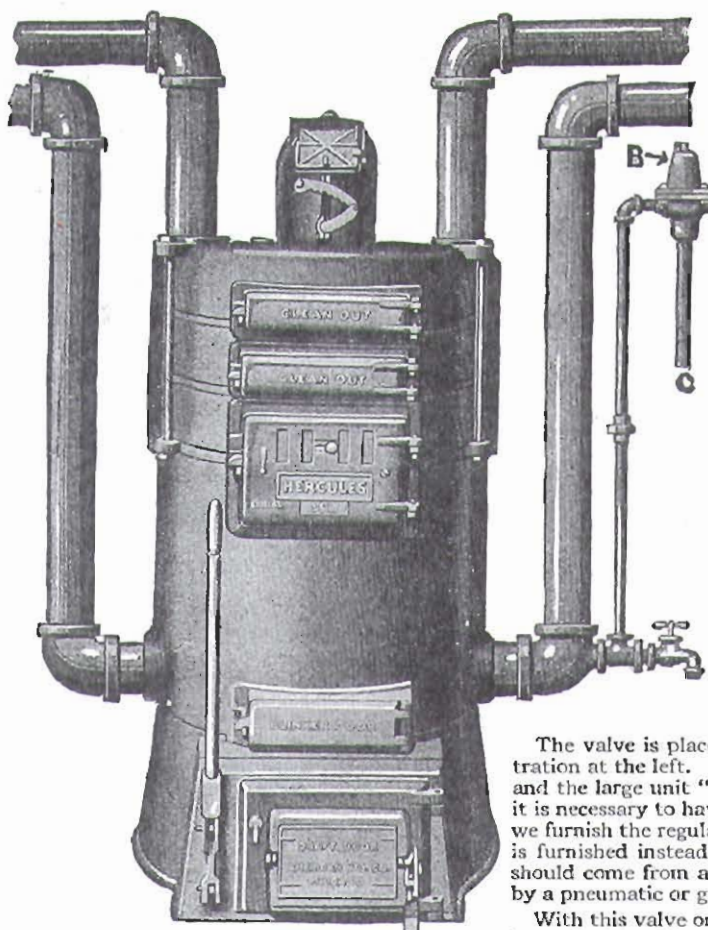
Hercules Automatic Pressure

Reducing and Relief Valve

Furnished on all

Hercules Hot Water Heating Systems

Where running water is available



ALL of our Hercules heating systems, unless otherwise requested, are now being furnished with our new Hercules automatic pressure reducing and relief valve. This valve maintains a minimum pressure of 12 pounds and a maximum pressure of 23 pounds on the system at all times. In other words, the pressure can only vary between 12 and 23 pounds. As soon as the pressure drops below 12 pounds, the automatic pressure reducing valve (A) opens up and lets more water run into the system, then after the fire burns up and the water becomes heated, the pressure naturally increases due to the expansion of the water. It gradually climbs until the 23 pound mark is reached, and at this point the automatic pressure relief valve (B) opens up and allows the surplus water to pass off from the system through the drain pipe (C).

The valve is placed in the cold water feed pipe leading to the boiler as shown in the illustration at the left. It consists of two units, the small unit "B" being the pressure relief valve, and the large unit "A" is the pressure reducing valve, as above explained. To use this valve it is necessary to have running water in your building. Where running water is not available, we furnish the regular open tank system of hot water heating. In that case an expansion tank is furnished instead of this automatic valve. Of course, it is not necessary that the water should come from a city water main. The valve works just as well if the water is supplied by a pneumatic or gravity tank water supply system.

With this valve on the system a pressure gauge is used to indicate the pressure on the boiler instead of an altitude gauge as used with an open tank system.

Has Many Advantages Over the Old Type of System

The great advantages derived from the use of this valve can easily be appreciated. First, its use permits you to eliminate the expansion tank entirely from your heating system. The expansion tank has always been more or less an undesirable accessory. It is usually hard to find a satisfactory place to put it, there is always that possibility of its freezing up if placed in the attic or some unheated part of the house unless it is kept well covered, and the fact that it must be placed above the highest radiator adds considerably to the labor expense involved in connecting it to your system.

Another advantage of the valve is that it maintains a constant pressure on the system so that the entire system is always kept automatically filled. Once the valve is connected and the water turned on, you never need to bother further with it, as it automatically supplies water to the system as needed. All that is necessary for you to do is to open up the air valves on the radiators occasionally and let the air out.

A third advantage of the valve lies in the fact that it maintains this increased pressure. It has long been

recognized that increased pressure on water raises the boiling point so that you can operate your system within a much wider latitude of temperature than it would be possible to do without this pressure.

On an open tank system it would not be possible for you to heat the water higher than 212 degrees, as that is the point at which water boils. With this added pressure on the water, however, you can heat the water to a temperature of 235 degrees, so you will readily see that you can get a much higher temperature in your radiators, if necessary, with this system. Circulation is increased due to the higher temperature of the water.

The system is more generally satisfactory in every way, and after the careful tests we have made we consider it a big step forward in hot water heating. This valve was adopted by us only after careful test and thorough consideration of various heating systems of this type, and we recommend it to you as the most satisfactory system for home heating.

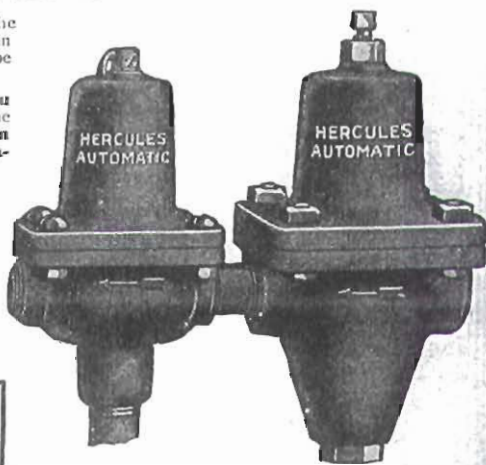


Illustration above shows an enlarged view of our Hercules automatic pressure reducing and relief valve. All the working parts of the valve are carefully and accurately machined, workmanship is high grade, and only the best materials are used. The design is such that the least possible number of parts are necessary for the results accomplished and the valve will give long and continued service with minimum attention. It represents the very latest development in hot water heating.

Improves Any Hot Water Heating System, New or Old

Our Hercules automatic pressure reducing and relief valve will improve any heating system. Any old style open tank system of hot water heating can be remodeled into this new type of pressure system by simply disconnecting the expansion tank, plugging up the opening to which it was connected and then inserting this automatic valve into the cold water feed line leading to the boiler as shown. Just a few hours work will do the job and satisfactory results are assured.

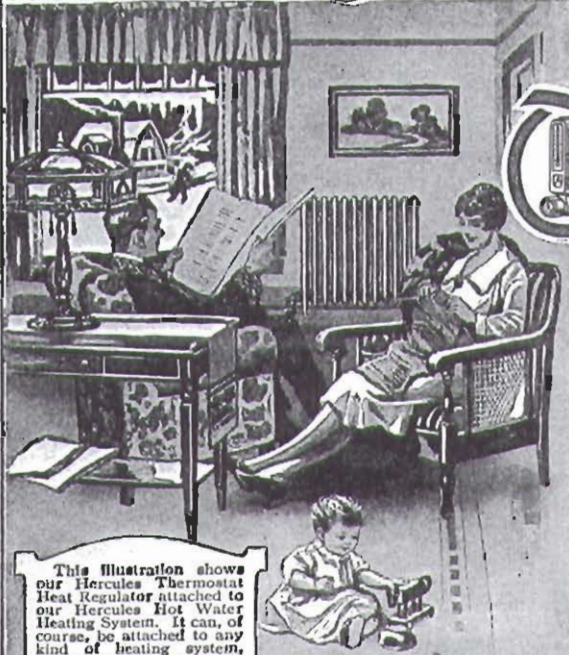
If you are in continual fear of your expansion tank freezing up, you can eliminate the tank by adding this valve. If you would like to eliminate the necessity of feeding water to your heating system, this valve will do away with this entirely, as it feeds the water to your system automatically.

Equipment includes one automatic relief valve and one automatic pressure reducing valve coupled together as shown in the illustration at the right, ready to connect to your system. Full instructions for installing and operating are packed with each valve so that any one can easily connect it up, and we recommend it with the assurance that it will give you satisfactory service.

42PK113 1/4—Shipping weight, 20 pounds..... **\$13.25**

The Hercules Thermostat

Will Keep the Temperature in Your Home Regulated to an Exact Degree All Winter Long



This illustration shows our Hercules Thermostat Heat Regulator attached to our Hercules Hot Water Heating System. It can, of course, be attached to any kind of heating system, steam, hot water, warm air or pipeless furnace, and is guaranteed to give perfect satisfaction in every way.

This device will not only keep the temperature in your rooms regulated to an even and exact degree throughout the entire winter, but it will open up the dampers on your heating system for you one hour before you arise in the morning so that the house will be heated to a normal temperature when you are ready to get up. It works constantly night and day, always preventing waste of fuel.

There is no advantage in keeping up a high temperature during the night, in fact, it is simply wasting fuel to do so, because 55 or 60 degrees is a much more healthful and comfortable temperature for sleeping. In the morning, of course, you want all of your rooms warm and comfortable before you get up so that you can rise and dress in comfort.

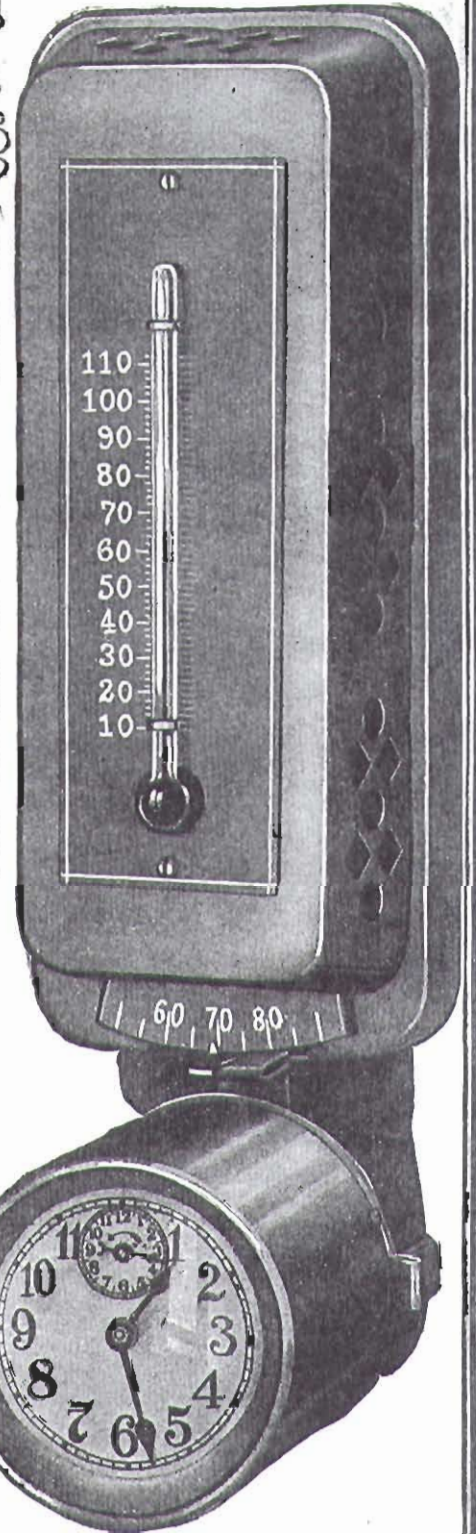
Our Hercules Thermostat Heat Regulator will maintain any temperature you set it for and you can set it for 60 degrees before going to bed and then set the clock so as to throw it over to 70 degrees, or whatever temperature you wish, an hour or so before you arise in the morning, and when you get up your rooms will be warm and comfortable.

It saves many trips to the basement. It prevents your rooms from cooling off, as it opens the dampers automatically as soon as the temperature drops below 70 degrees, or whatever you have set it for, and it prevents overheating your rooms, because it closes the dampers as soon as the temperature goes above that degree. Just think what a great amount of fuel is thereby saved in the course of an entire season.

Pays for Itself in One Winter.

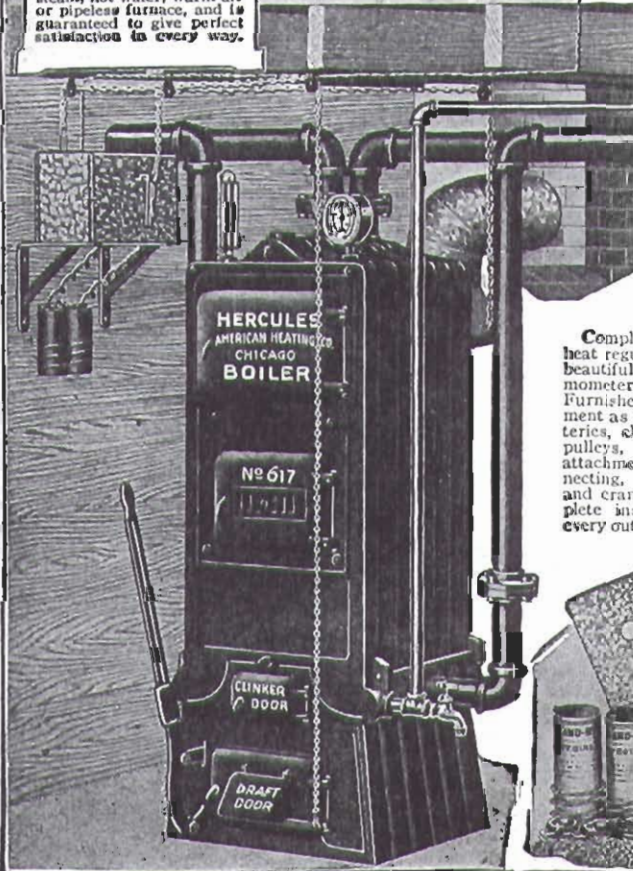
This device will pay for itself the first winter used. You will need to give your heating system only about one-half the attention, as the draft doors will be regulated automatically.

Complete outfit includes thermostat heat regulator in solid brass case with beautiful brushed brass finish. Thermometer mounted on case as shown. Furnished complete with clock attachment as described. Includes also batteries, clockwork motor, ball bearing pulleys, chains and wire for damper attachment, and electric wiring for connecting, also rubber covered staples and crank for winding motor. Complete instruction book packed with every outfit.



Full Instructions for Installing Furnished With Each Outfit.

42PK1176¹/₂ — Outfit complete with clock attachment. Shipping weight, 30 pounds. **\$29.95**



What Our Customers Say

Camp Hill, Penn.
Sears, Roebuck and Co.,
I installed one of your warm air heating systems in a building which I rent to a tenant. I did all the work myself in six hours and saved \$90.00 by purchasing the Hercules system from your firm. I had no difficulty whatever in setting it up and the plant has given me complete satisfaction.
W. C. ENTERLINE.

111 Elgin Ave., Westmont, N. J.
Sears, Roebuck and Co.,
The warm air heating system I purchased of you is very satisfactory. This is my second heater from your firm. I installed one in my house here about five years ago and I liked it so well I put one in this house when I built it. I did a great bit of the work myself in my spare time, Saturday afternoon.
WARREN LARICKS.

Parma, Ohio
Sears, Roebuck and Co.,
We are more than pleased with our warm air heating system which we purchased from your firm and will say that there is no better way to keep the house warm than with a Sears, Roebuck furnace. We saved \$100.00 in purchasing this heating system from you and we burned no more coal last Winter than we used when we used stoves. The house is twice as comfortable as it was when we used stoves. Anyone wanting a good heating system should not hesitate to get a furnace like ours.
G. BRUGGER.

Lincoln, Neb.
Sears, Roebuck and Co.,
I purchased your Hercules Hot Water Heating System No. 322. The heating plant is as good as it can be and I do not see any way of improving it. We are very much pleased with it. We can keep every room heated to 70 degrees when the thermometer registers 30 below zero. We burn coals, wood and soft coal.
G. H. BUESING.

24 Honora Ave., Detroit, Mich.
Sears, Roebuck and Co.,
Wish to say that I am very much pleased with the Hercules Steam Heating System which I purchased from you. I figured that I saved about \$200.00 by installing your plant. It heats every room in the house nicely and that is something we never could do with stoves. You have my permission to use my name in this connection and I will recommend your Hercules Steam Heating Plant to anyone who desires a good heating system for their home.
W. M. DELANEY.

Bridgeport, Neb.
Sears, Roebuck and Co.,
Our Hercules Hot Water Heating System has proven very satisfactory. I am an engineer on the railroad. I finish my run about 4 P. M. My son and I worked evenings installing the plant and it only took about one week to finish the job. Everything fitted very nicely and the only pipe we had to cut was the small pipes leading to the radiators. In the coldest weather we never had to heat the water in the boiler above 180 degrees.
O. M. THOSTESEN.

535 N. Third St.,
Missouri Valley, Iowa.
Sears, Roebuck and Co.,
I highly recommend the Hercules Volcano Warm Air Furnace which I bought in August, 1918, to anyone who wishes to install a modern heating system. I had the carpenter cut out the holes for the registers, but aside from this I did all the work of installing myself in five evenings. All of our rooms are nice and warm and are evenly heated and the furnace has been perfectly satisfactory in every respect.
CHAS. W. BYERS.

Stowe, Penn.
Sears, Roebuck and Co.,
I am well pleased with the Steam Heating System which you purchased for me last June. It works so good that it keeps the entire house at 80 degrees temperature in coldest weather. I cannot say too much for it. We attend to the fire three times a day, in the morning, evening and just before retiring; have no trouble holding fire over night and the rooms are warm and comfortable in the morning. I did all the work myself.
PAUL PICKARD.

Bethlehem, Pa.
Sears, Roebuck and Co.,
I believe your Hercules Hot Water Heating System, which I have installed, is as good as any on the market and it costs at least one-third less than any other I installed during my spare time. One of the best plumbers in town was here and looked at the plant and he pronounced it a good job; have no trouble keeping the entire house warm without forcing the furnace.
JOS. SIGLIN.

272 Caven St.,
Indianapolis, Ind.
Sears, Roebuck and Co.,
I am well satisfied with my Hercules Steam Heating Plant. I had no trouble at all to install the plant. We are able to keep every room warm with only 1/2 a pound of steam pressure. I burn a little more fuel than I did with stoves but I am now able to burn cheaper coal so my coal bill is about the same. We are now able to keep all our rooms warm which we could not do with stoves.
JOHN C. SCHILLING.

Lenox, Ill.
Sears, Roebuck and Co.,
I am an engineer myself and will say that your Hercules Steam Heating Plant is the best I ever saw. We can get all the heat we want and then some in the coldest weather and every room in the house is warm and comfortable. We used about one ton of soft coal a month and have no trouble whatever in holding fire over night. I will be glad to recommend your heating system to anyone who has been down to 30 below zero.
JAMES ROLAND.

Merrill, Wis.
Sears, Roebuck and Co.,
We are burning wood in our Hercules Hot Water Heating System with fine results. We have no trouble holding fire over night by laying a little ashes on the grate and filling it up with hardwood in the evening. Our rooms are heated to about 60 degrees in the morning and the whole system works like a charm. It is as good as any on the market. I saved \$100.00 by purchasing this plant from you. The temperature here has been down to 30 below zero but we did not have to force the fire.
E. O. GENZ.

33 10th St., Troy, N. Y.
Sears, Roebuck and Co.,
I am well pleased with the warm air heating system purchased of you. I have one of your Volcano Furnaces warm in the coldest weather. I did all the work myself, with help of a stove repair man, and saved about \$50.00 by purchasing this plant of you. If anyone would like to see my heating system I will be glad to show it to them.
P. PETERSEN.

48 N. San Francisco Ave.,
St. Louis, Mo.
Sears, Roebuck and Co.,
Sometime ago I purchased one of your Hercules Hot Water Heating Boilers and am pleased to say that it is giving very satisfactory results. I am using soft coal for fuel and have no trouble in keeping all of the rooms in the house heated to 70 degrees in the coldest weather.
1518 First Ave.,
Fort Madison, Iowa.
Sears, Roebuck and Co.,
I am well pleased with my Hercules Steam Heating Plant. I installed the entire plant myself. I laid off two days to put the rest of the in and finished up the spare time. The work during I had was a 14-year old boy. The boiler holds fire over night and the rooms are warm and comfortable to sit in during the winter. We burn soft coal.
G. BREWS.

Mulford, Mass.
Sears, Roebuck and Co.,
I have one of the best steam heating plants in this section and have no difficulty in heating my residence in the coldest weather. It requires very little time to take care of it and I take delight in showing it to my friends and recommending it to anyone thinking of putting in a heating plant. I installed the plant myself. We have no trouble getting every room in the house warm and comfortable.
SAMUEL S. OLIVANT.

Pekin, Ill.
Sears, Roebuck and Co.,
We are greatly pleased with our Hercules Heating System and would not want to go back to the old heating stove days for anything. We are burning soft coal and have no trouble keeping all of the rooms nice and warm in the coldest weather. We never have to force the fire and the rooms are all evenly heated.
HENRY A. WORDLORP.

311 Washington St.,
Estherville, Iowa.
Sears, Roebuck and Co.,
I am very much pleased with my Hercules Steam Heating System. I installed the entire plant myself with the help of 12-year old boy. We are burning soft coal and slack and are getting fine results. We are able to keep all of our rooms evenly heated to a comfortable temperature without crowding the furnace.
I installed one of your steam heating plants for Mr. George Grico. He is very much pleased with it. He had three heaters and one kitchen range before heating his house and store. He burned 2 tons of coal per month and spent a lot of his time taking care of the ashes and attending to the look after twice a day, and he burns 1 ton of coal less per month.
HARRISON A. STROHE.

1818 First Ave.,
Fort Madison, Iowa.
Sears, Roebuck and Co.,
I am well pleased with my Hercules Steam Heating Plant. I installed the entire plant myself. I laid off two days to put the rest of the in and finished up the spare time. The work during I had was a 14-year old boy. The boiler holds fire over night and the rooms are warm and comfortable to sit in during the winter. We burn soft coal.
G. BREWS.

1518 First Ave.,
Fort Madison, Iowa.
Sears, Roebuck and Co.,
I am well pleased with my Hercules Steam Heating Plant. I installed the entire plant myself. I laid off two days to put the rest of the in and finished up the spare time. The work during I had was a 14-year old boy. The boiler holds fire over night and the rooms are warm and comfortable to sit in during the winter. We burn soft coal.
G. BREWS.

Mt. Pleasant, Penn.
Sears, Roebuck and Co.,
The Hercules Steam Heating Plant purchased from you last July arrived in good condition. I had no trouble installing it in the evenings after I had finished my day's work. To say it gives perfect satisfaction would not be an over-estimate. We have no trouble to keep the house warm in the coldest weather. Often I have to open the windows with only 2 pounds steam pressure. You saved me \$250.00. I made a good month's extra pay and will gladly recommend your plant to anyone.
J. H. GORTON.

131 E. 5th Ave., Altoona, Penn.
Sears, Roebuck and Co.,
The heating plant I purchased from you last Fall is giving entire satisfaction. I had no trouble in installing the plant and will say that anyone following your instructions can sure erect a Hercules Heating Plant. All the material came in first class condition. I saved at least \$180.00 by purchasing from you. We have had a very severe Winter and although it was exceedingly cold our house was comfortable at all times.
J. D. EMERIC.

406 N. 8th St., Beatrice, Neb.
Sears, Roebuck and Co.,
I ask for no better heating plant than your Hercules Hot Water Heating System. It is all that can be desired. We purchased complete plumbing and heating system from you and everything has worked very satisfactorily. We worked every six-room cottage warm keep our six-room cold weather night and day in real cold weather. We could never do this with our old stove; have no trouble in keeping our rooms heated to 70 degrees.
S. W. CARNAHAN.

Milan, Ind.
Sears, Roebuck and Co.,
The Hercules Hot Water Heating Plant that we bought of you last season has given perfect satisfaction. We heated our ten-room house without crowding the furnace on the coldest day last Winter, saved \$110.00 over the best bid I could get, and I consider your plant far superior to the one I was offered at the higher price.
E. P. SCHOCKLEY.

You Will Say The Same



Cadiz Park Ave., Cadiz, Ohio.
Sears, Roebuck and Co.,
Hercules Warm Air Heating System works best with the boiler.

Marine City, Mich.
Sears, Roebuck and Co.,

Just to let you know that I am very much pleased with my Hercules Warm Air Heating System. I do not know of a single improvement that can be made in any heating system. It is as good a working system as I have ever used and I have operated many different kinds. We are using mine run coal for fuel and are getting very good results; have no trouble keeping the entire house warm without forcing the fire. The system is very satisfactory in every way.
FREDERICK OHLERT.

Mounds, Ill.
Sears, Roebuck and Co.,

We are very much pleased with our pipeless furnace which we purchased from you. I installed myself without any trouble whatever. We are burning soft coal and are using no more fuel than we did with stoves, but I now have the entire house nice and warm and could never do this with stoves. We are more than pleased and wish to recommend your pipeless furnace to all who wish a good heating plant at a low price.
R. C. CONNELL.

Easy Brady, Penn.
Sears, Roebuck and Co.,

I installed a Hercules Hot Water Heating Plant myself. I followed your instructions and had the plant working four days after it arrived; am well pleased with it and saved \$400.00 by getting it from you. I can heat the entire building without forcing the fire and our fuel bill is less than when we heated this building with stoves. We use common slack from mine run coal and find it gives very good results.
HUGH F. HEIGLEY

Ashlyn St.,
Pittsburgh, Penn.
Sears, Roebuck and Co.,

Our Hercules Hot Water Heating System has given perfect satisfaction, both as a fuel saver and heat producer. Last Winter was very severe here, yet we had our house perfectly heated at all times and burned only 124 bushels of coal. If this Winter is mild compared to last year I do not think we will burn 100 bushels. If we have yet to find them,
G. E. RICHARDS

1011 H. St.,
Sears, Roebuck and Co.,

I am well pleased with my furnace; have heated my house to 80 degrees in winter.

Leavittsburg, Ohio.
Sears, Roebuck and Co.,

The warm air heating system I purchased from you has proved very satisfactory. We have our No. 222 Hummer Furnace installed. We moved into a new house which was not finished and had the house comfortably warm before any of the inside work was put in. This is one of our own houses which we ordered from your building material department. We are well pleased with both the house and furnace.
W. B. ENSOR

Rochester, Minn.
Sears, Roebuck and Co.,

I am well pleased with my Acme Volcano Warm Air Furnace and have told others the same. If I ever build a house of my own again I would like to have the same kind of a system. Some of my neighbors burn from 4 to 6 tons more coal than I do and are not heating any more space. Any one in need of a heating plant will make no mistake in installing your furnace.
GEORGE ROWLEY.

Somerville, Ind.
Sears, Roebuck and Co.,

I installed my warm air heating system in two days, with one helper; have no trouble keeping temperature at 70 degrees all Winter. Our basement was heated to just the right temperature for our vegetables, while our neighbors lost much of their fruit, potatoes, etc., from frost. We do not touch the fire after 10 P. M. and the rooms are comfortable in the morning. Not one in the family has had a cold this winter.
ROSCOE C. MILLER

We would have no trouble keeping the house warm in the rooms in the coldest weather. We like it much better than stoves. It heats better and we do not have the coal and ashes in our rooms. We saved money by purchasing this furnace from you. We burn wood, coals and soft coal. I installed the plant myself.
WM. J. C. SCHROEDER

Derry, N. Y.
Sears, Roebuck and Co.,

We are entirely pleased with our Hercules Steam Heating System. Before installing this plant we had a kitchen range and a parlor stove down stairs, burned from 6 to 7 tons of coal each Winter, besides 4 cords of wood, and of ten and heated five rooms. Now we heat these five rooms with no more fuel than we did before.
MILIO VADEBOUCOEUR.

New Albany, Ind.
Sears, Roebuck and Co.,

My Hercules Warm Air Furnace is giving excellent results. We are burning soft coal and some wood and I can heat my house with the same amount of fuel that I used to heat only part of it with a stove. I did all the work of installing myself and had no trouble. The furnace works fine and I would not be without it for any amount of money.
ADOLPH HUBLER

828 Forest St.,
Harrisburg, Penn.
Sears, Roebuck and Co.,

With the blue prints and simple instructions which you sent, my brother and I had no trouble installing our Hercules Steam Heating System. It has proved very satisfactory. It is a great improvement over the old way of heating by stoves. We now have an even temperature and every room in the house is comfortable, whereas, in the old way we were burning coal and still freezing. We are all well pleased with the result.
R. W. WOOLF.

Plint, Mich.
Sears, Roebuck and Co.,

I am more than pleased with my Hercules Steam Heating System which I purchased from you. I installed the entire plant myself with no help whatever. We have a nice and warm in the entire house and we do not have to force the fire at all. We attend to the fire about three times a day and have no trouble in holding it nice and warm in the morning. We burn soft coal.
EMIL SATTER

Winburne, Penn.
Sears, Roebuck and Co.,

I just want to let you know that we now have our Hercules Pipeless Furnace, which we purchased from you, installed and are more than pleased with it. We saved at least \$70.00 after figuring out our expenses by purchasing this furnace from you. It heats the house just right. The lowest bid we could get for a furnace like yours was \$180.00 and we had other bids running up to as high as \$210.00. I set the entire furnace up myself in one day and I think this is the best furnace on the market.
JOHN SEDLAK

Cooper Ave., Detroit, Mich.
Sears, Roebuck and Co.,

I consider my Hercules Heating System very satisfactory. I can say that, compared with contractors figures, I saved \$60.00. Although I use a little more coal than with a stove, I believe it a entire house with a stove, so was not getting full value of the fuel which I did use.
W. J. ROCKEY.

White Sulphur Springs, W. Va.
Sears, Roebuck and Co.,

We are very much pleased with our Hercules Warm Air Heating System. We are able to keep a nice, even temperature all over the house. Up in the mountains, where we have very cold nights, some of them are as low as 38 degrees below zero and still I never had to force the fire. We are using a good grade of soft coal and only have to attend all rooms at 10 days. We keep all rooms at 70 degrees in the coldest weather.
T. W. SCHOEN.

1036 Union St., Indianapolis, Ind.
Sears, Roebuck and Co.,

The heating plant you sold me giving very good satisfaction. We have had some very cold weather here last Winter, the temperature falling down as low as 18 degrees below zero, but the house was always warm and comfortable. Your plant is a fuel saver. This is the third Winter we have had it and it works just as good as it did the day we put the first fire in it. We would not want to be without it.
JOHN CHRIST.

Wood River, Ill.
Sears, Roebuck and Co.,

I would not want a better heating plant than my Hercules Hot Water Heating System. We now burn the same amount of fuel we used to burn with stoves, but there is the difference that we are always comfortable and every room in the house is nice and warm. I installed the entire plant myself. We burn lump coal. We had 24 degrees below zero here last Winter but the house was always warm and comfortable.
EDWARD SMITH

Speers, Penn.
Sears, Roebuck and Co.,

We find our Hummer Pipeless Furnace very satisfactory. We would not know what to do without it. There is no freezing on one side and too hot on the other, the way it used to be when we were using stoves. It keeps all our rooms very comfortable. We saved at least \$40.00 by purchasing this furnace from you and I installed it myself, finishing the entire job in one day. We are burning soft coal and have no trouble holding fire over night.
GIBSON H. WILLIAMS

1242 Oak St., Beloit, Wis.
Sears, Roebuck and Co.,

I am very well pleased with my Hercules Warm Air Heating Plant. It does all I expect of it and all you guaranteed it to do, so therefore, I would gladly recommend it to anyone; have installed the plant myself with the help of one man, who assisted me in assembling the furnace. We are burning no more coal than we did with stoves and the house is much more comfortable.
J. E. LINDGREN.

Carlton, Minn.
Sears, Roebuck and Co.,

We are well satisfied with our Hercules Heating Plant. We can keep all the rooms at temperature in burning yellow birch and pine when we except for the night fires, gives excellent satisfaction burning either wood or coal; have no trouble keeping all rooms heated at 70 degrees with the outside at 25 degrees below zero.
L. H. BUGBEE & SON.

4th & N. P. Ave., Fairmont, Minn.
Sears, Roebuck and Co.,

I can say that I am well satisfied with my Volcano Warm Air Furnace; had no trouble installing it. I did all the work myself. It has saved \$85.00 over the lowest bid I could get elsewhere. We had one and one-half tons less coal with this furnace than we did when we used to heat our house with stoves.
FRANK NICHOLS.

1665 College Ave., Indianapolis, Ind.
Sears, Roebuck and Co.,

We are perfectly satisfied with our Hercules Steam Heating System. It gives better and more satisfactory service than any other or ten others says that it is the best and easiest on his list to take care of. We are using Pochontas coal and all rooms are properly heated. We attend to the fire just three times a day. The boiler holds fire excellently over night. Our rooms are 60 degrees in the morning.
VICTORIA A. WILSON

Stafford, N. C.
Sears, Roebuck and Co.,

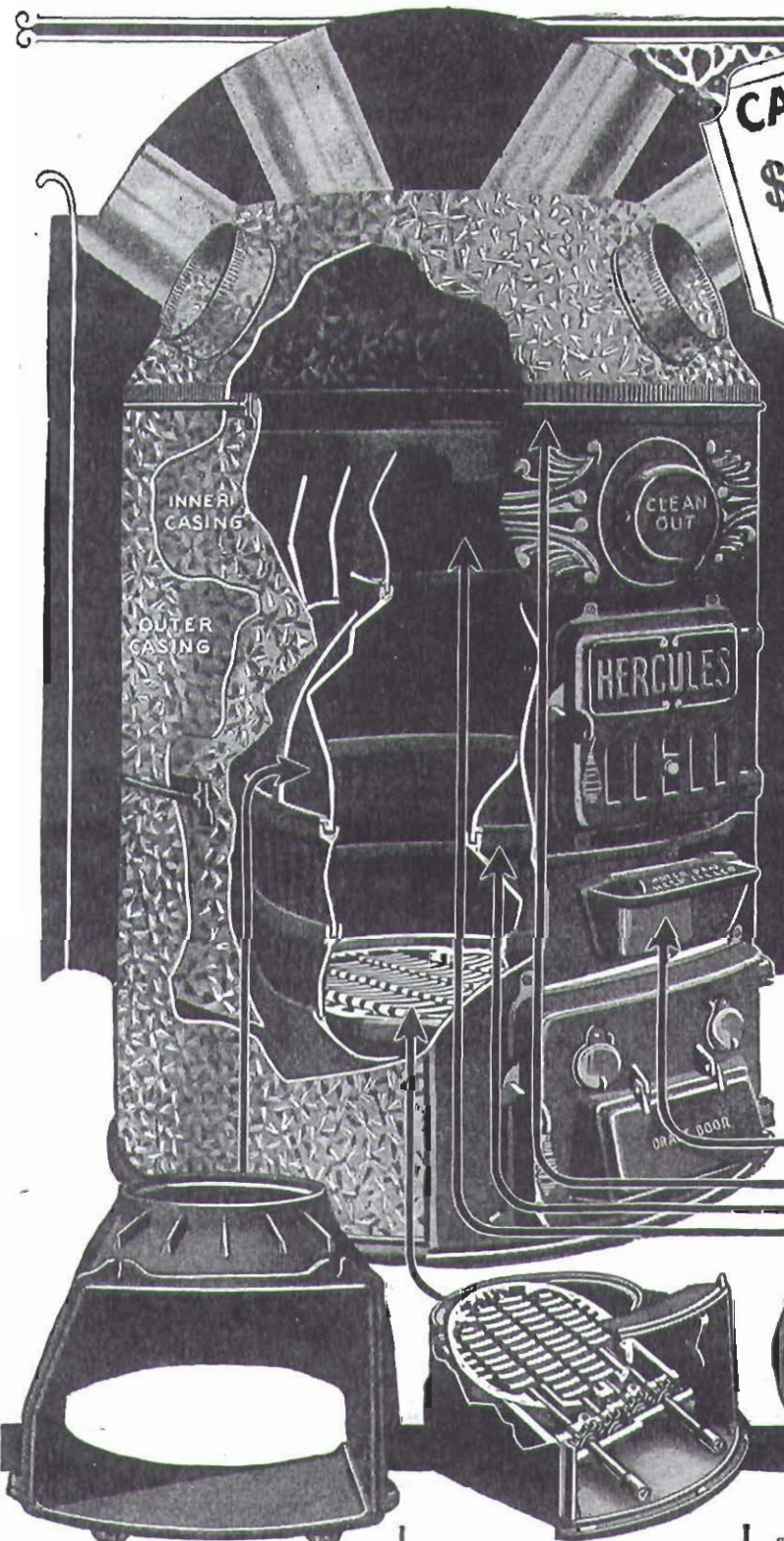
The Hercules Hot Water Heating Plant I purchased from you certainly is a winner. I find that all our rooms are heated to 70 degrees when the thermometer on the boiler registers 160 degrees and I don't think that the temperature of the water has ever been higher than 160 degrees. We are very much pleased with the heating plant and saved about \$100.00 by purchasing from you.
ALONZO DIFENDORF

135 Walnut St., Mt. Carmel, Penn.
Sears, Roebuck and Co.,

I am very well pleased with the Hercules Heating Plant. I have posed on all sides, and it seems it was only paid for the boiler to Winter. I had no trouble installing the plant. With your blue prints and plans anyone who can read should be able to do all the work. I recommend your firm for any and square dealing.
HENRY C. KAUFMAN.

The HERCULES Furnace

CASH PRICE
\$43⁵⁰
 18-In.
 Size



HEALTHFUL HEAT in Every Room ~

The best health authorities agree that warm air in circulation provides the most healthful means of home heating. With the Hercules Warm Air Furnace in your home, the air in your entire building is kept in constant circulation through the furnace and the warm air pipes to your rooms, and then back again to the furnace through the cold air duct which connects to the bottom of the furnace in the basement. This air is kept moistened at all times by the water in the large water pan mounted in front of the furnace. Our Hercules Furnace maintains healthful heat in every room.

Above illustration shows the construction of the high ribbed cast iron fire dome of this furnace. The unusually high combustion chamber provides ample space for the proper combustion of the fuel so that you get the most efficient heating results. Notice the large size feed throat on this fire door section, which provides a feed door opening large enough to admit large chunks of wood or coal. The raised ribs around this fire dome add to the heating surface and strengthen the casting.

The entire grate section of our Hercules Warm Air Pipe Furnace is made up in one assembly, resting on a hinge support at the back of the ashpit and supported by two cast iron hooks in front. By pulling these hooks forward at the front, the entire assembly can be lowered on the rear hinge so that grate bars can be removed and replaced with little effort. You just insert the grate bar and then lift up the grate frame, the hooks automatically fall into place and the furnace is ready for use. Grates are triangular revolving type, clinkers are easily ground up and discharged into the ashpit.

The above illustration shows the construction of the large circular cast iron radiator on this furnace. The entire top and sides are made in one casting and the bottom plate of the radiator is another. This bottom plate is very firmly cemented and bolted to the bottom of the radiator with a deep tongue and groove joint. This radiator is of unusually large proportions and is unusually high providing the necessary heating surface for greatest heating efficiency. The smoke collar is connected at the back of the radiator and there is a cleanout opening on the front, through which it can be thoroughly cleaned.

The fire pot is made in two sections, which fit together with deep tongue and groove joints. These castings are made from high grade iron for greatest durability, and are heavily corrugated to provide an extra large amount of heating surface. The two-piece construction of this fire pot provides ample leeway for expansion and contraction and reduces to a minimum the possibility of castings cracking. These castings are made from accurate patterns so that perfect fit is assured.

Means a Big Saving of Fuel

Solid Comfort All Winter Long With Our Hercules Warm Air Pipe Furnace

Your furnace outfit is, without any question, the most important piece of equipment in your entire building. Fuel economy is a most important factor. Remember, your furnace will be in operation for many years. Each year it will be either burning fuel economically or wasting it.

The furnace you select should be designed for greatest heating efficiency. It should have ample heating surface in proportion to grate area and it should have ample air chamber capacity and ample fire travel to obtain the full benefit of all available heat units in the fuel.

A High Grade Furnace Built for Service

Our Hercules Warm Air Pipe Furnace has all of these features worked out to a high degree of perfection. It is a strictly high quality furnace designed for greatest efficiency and durability. It is a furnace that will continue to give you satisfactory service for very many years with a minimum amount of attention and minimum expense for fuel.

When you can buy a furnace which is always the best in these three features at the price quoted on our Hercules you have secured the greatest of heating values. Constant use by thousands of our customers has proved the Hercules the best value in furnaces. It has stood the test in all types of homes, in every kind of weather and has always lived up to expectations.

Yearly improvements have made our Hercules the nearest thing to perfection. Our ability to buy material in great quantities and the rapid sale of our furnaces have enabled us to quote such a low price. Only the World's Largest Store can do this.

Every Hercules Heating System Guaranteed

Our guarantee protects you in your purchase of this heating plant. We are willing to guarantee you satisfaction or return your money—that certainly is proof that we have faith in the Hercules, that we are sure it will live up to all of our claims. Years of experience in the furnace business has taught us and thousands of satisfied customers to expect the utmost in heating perfection from our Hercules Warm Air Pipe Furnace—that is what we are offering you, heating perfection at a price usually paid for a far inferior product.

EASY PAYMENTS
\$10.00 DOWN
\$10.00 A MONTH

Our Heating Offer Can't Be Beat

Only the finest quality material is used on Hercules Heating Systems. We design your system for you. You get free engineering service. You get specially prepared plans. You get a complete instruction book covering every phase and every detail of the installation. You have an opportunity to save from \$100.00 to \$200.00 on the installation cost alone by looking after the work yourself. You get a strictly modern heating system unexcelled by any in the country for fine quality material and heating efficiency. In short, you get service and quality, and you get it at a price that spells dollars in your pocket. That's what you get when you order a Hercules Heating System, and that's why we say our proposition cannot be beat. Get our estimate and judge for yourself.

Peerless Flue Cleaner

\$1.45



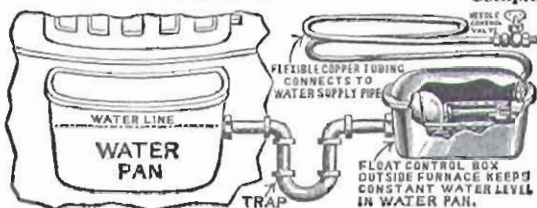
The Greatest Ever

Here is the most practical and efficient furnace flue cleaner on the market. It is flexible in one direction only. It is absolutely rigid in the other, so that it is always under complete control of the person using it. All of the soot in any furnace radiator can be easily removed in a few minutes. We know of no other flue cleaner on the market that can possibly compare with this in actual results. It will pay for itself in one month in fuel saved. You will make a big saving in your coal bills by keeping your furnace radiator clean.

42K165½—Shipping weight, 4½ pounds..... **\$1.45**

Hercules Automatic Water Pan Filler Saves Time and Labor

\$4.95 Complete



This device completely relieves you of the task of keeping the water pan on your furnace filled. It is easily attached to any furnace by simply tapping into the water pan and making the connection. The flexible copper water supply tube is then connected at some convenient point on your water supply pipe. Once installed, it requires no more attention, operates constantly throughout the entire heating season and it will last for many years without attention.

You are always assured of correct humidity as the water pan can never run dry. Equipment includes bronze float valve with Monel metal needle point, 3-inch copper float, brass float chamber, five feet ¼-inch flexible copper tubing, needle control valve, and trap. **\$4.95**

42K121—Shipping weight, 5 pounds..... **\$4.95**

Prices and Dimensions Hercules Warm Air Furnace Shipped From Factory in OHIO

Catalog No.	Diam. Fire Pot, In.	Size, Smoke Collar, In.	Size, Feed Door, Inches	Ht., With Castings, In.	Diam. Castings, In.	Shpg. Wt., Lbs.	Cash	Easy Payments	Terms:
42K3983	18	7	8¾ x 11½	56¼	¾	720	\$ 43.50	\$ 48.00	\$10.00 Down and \$10.00 per Month
42K3984	20	8	10½ x 12½	60¼	¾	820	51.75	57.00	
42K3985	22	8	11 x 13	63¼	¾	915	64.00	70.50	
42K3986	24	8	11 x 13	65¼	¾	1,080	75.00	82.50	
42K3987	26	9	11 x 13	68	¾	1,350	87.00	93.00	
42K3988	28	9	10½ x 12½	72¼	¾	1,525	109.50	120.50	
42K3989	30	10	10½ x 12½	73¾	¾	1,650	133.35	147.00	

Above prices include furnace complete with galvanized top and casing, but warm air pipe, registers, smoke pipe, smoke damper, etc., are not included. Smoke pipe, smoke damper, hot water coil and wood burning grate listed at right.

If wanted with gas burner in addition to coal grate write for prices.

If ordering on easy payments please fill out time payment order blank enclosed. To take advantage of our easy payment offer it is necessary that you hold title to the building in which the furnace is to be installed. No interest or other expense to be added to monthly payment prices.

Let Us Send You an Estimate on a Modern Warm Air Heating System for Your Home

Our experience in the development, perfection and distribution of our Hercules Warm Air Heating Systems extends over a period of over twenty-five years.

We have proved to many thousands of our customers that our Hercules Warm Air Furnaces are easy to install. That they fulfill every claim we make for them. That the broad guarantee under which they are sold and our liberal merchandising policy are a reliable assurance of satisfaction.

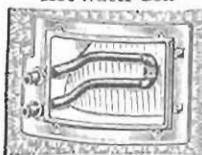


The above illustration shows in detail the air space casing insulation of our Hercules Pipe Furnace. The outer casing is made of strong gauge galvanized sheet metal in two sections, an upper section and a lower section. Inside of this outer casing and spaced one inch apart from around the entire furnace, there is suspended an inner casing also made of galvanized iron, which extends down to a level with the top of the ashpit, providing a one inch insulating space around the entire heating body of the furnace. Effectively preventing the loss of heat through the furnace casing, this one-inch insulating air space is a big coal saving feature on this furnace for the reason that it prevents heat loss in the basement.

Above illustration shows the large capacity cast iron water pan supplied with this furnace. This water pan is mounted in the front casting just beneath the fire door and directly opposite the fire pot castings where the fire is hottest, thus insuring sufficiently rapid evaporation to provide the proper degree of moisture to the air as it circulates through the furnace and up to your rooms.

The water pan is, of course, open inside the furnace air heating chamber. The part of the pan which projects out through the front of the furnace, however, is provided with a hinged cast iron cover. When filling, this cover is simply raised and pushed aside and the water poured right in, making a very convenient arrangement.

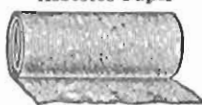
Hot Water Coil



Hot Water Coil fits any pipe or pipeless furnace we sell. Be sure to state fire pot diameter of furnace. Shipping weight, 10 pounds.

42K1675¼..... **\$1.85**

Asbestos Paper



A fireproof material, made of natural mineral asbestos fibers reduced to a pulp and spread out into a sheet of uniform thickness. It is usually applied with starch paste, or the special Asbestos Paste listed below.

In addition to covering furnace pipes, asbestos paper is used for covering walls, partitions and ceilings exposed to heat, and as a lining for floors and ceilings. It comes in rolls 36 inches wide. Shipped from our store. Prices subject to market changes.

42K193¾—10-yard roll. Shipping weight, 10 pounds..... **\$1.00**
 42K194¼—50-yard roll. Shipping weight, 50 pounds..... **\$3.95**

Cold Water Paste



For pasting down canvas flaps on Air Cell pipe covering. Used also for pasting asbestos paper to tin furnace pipes on warm air heating systems. Simply mix with cold water and use. Comes in 2½-pound package.

42K195—Per package..... **35c**

Wood Burning Grate



Cast iron, sets on top of regular furnace grate. Be sure to state fire pot diameter of furnace. Shipping weight, 12 pounds. Shipped from factory in OHIO.

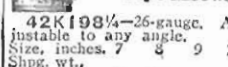
42K1674¼..... **\$2.25**

Galvanized Smoke Pipe



42K197¼—26-gauge. Sold only in 2-foot lengths. Improved lock seam. Size, inches, 7 8 9 10 Shpg. wt., lbs., per length, 3½ 4 4½ 5 Per length, .44c 47c 50c 54c

Galvanized Adjustable Smoke Pipe Elbows



42K198¾—26-gauge. Adjustable to any angle. Size, inches, 7 8 9 10 Shpg. wt., lbs., 2 2½ 2½ 3 Each..... 38c 42c 48c 60c

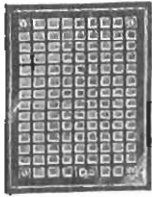
Smoke Pipe Dampers



42K199 Cast iron automatic lock type. Size, in., 7 8 9 10 Shpg. wt., lbs., ½ ¾ 1 1½ Each..... 22c 30c 45c 60c

Description of the Registers, Fittings and Pipe Furnished With Our Hercules Warm Air Heating Plants

Fill in the information blank enclosed in this catalog and send it to us for an estimate of the Warm Air Plant best suited to your building.



Floor Register.

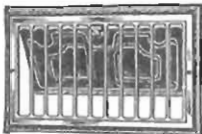
Pressed Steel Registers.

The registers may be placed in the floors or in the walls, but unless otherwise requested we always figure on baseboard wall registers as we believe them to be the most satisfactory. Wall registers cost a little more, but they have two very great advantages. They are out of the way where they cannot be walked upon, and also there is less chance of dirt or sweepings getting down into the pipes. Either floor or wall registers will heat perfectly and if you want us to estimate on floor registers we will gladly do so.

Our floor registers are made entirely of pressed steel. This makes an ideal floor register, for the pressed steel face is very rigid and will not bend or give under the weight of the heaviest person, while the steel frame or body reinforces it from the under side, making the complete register lighter in weight and very much stronger. We also include a cold air return face made of oak wood, which can be nicely finished to match the floors. There being nothing but cool air passing through this large face it is entirely safe to make it of wood.



Baseboard Register.



Side Wall Register for Above Baseboard.

Our wall registers are made entirely of pressed steel. They are very strong and practically unbreakable. The wall registers for the first floor are set down into the baseboard and are made with a deep throat to give plenty of air space. Those for upstairs are placed above the baseboard and fit flat against the plastering. Our wall registers are all equipped with one-piece deflecting valves which throw the air current out away from the walls. We use the plain square lattice design for all floor registers, and straight bar design for the wall registers as illustrated.

Unless otherwise instructed we always figure on black japanned finish. This is generally used, as it costs less than the fancy finishes. We can, however, furnish any of the standard electroplated finishes, but carry only the oxidized copper in addition to the black japanned in stock at our factory. Other special finishes must be shipped separately, direct from the register factory. We never recommend any of the plated finishes for the floor registers, borders or return air faces, because they will not withstand the wear of being walked on, but for the wall registers it is sometimes desirable to have a finish to match the other hardware trimmings of the house.



Cold Air Face.

Under some conditions it is possible to use our side wall registers on the first floor and continue the same pipe up through the wall to the room above, thus heating two rooms from one pipe. In the case of small rooms, or rooms that are not to be heated all the time, this method is often found desirable and entirely satisfactory.

Our Adjustable Elbows.



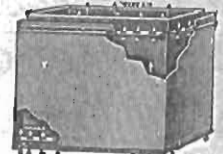
Adjustable Elbow.

Our elbows are adjustable and their use enables anyone to apply the exact angle required without the expense and labor of constructing special elbows. By taking the elbow at both ends and turning it, the adjustment is easily effected. These elbows are made by machinery especially designed for their manufacture and are as nearly perfect as it is possible to produce. The seams in our elbows are made so that instead of being the weakest part, they are the strongest part in the elbow and they cannot be taken apart without destroying the material.

All Pipes and Fittings That Are Between Walls or Between Floors and Ceilings Are Double Walled.

The two thicknesses with an air space between make them doubly safe.

All our tin fittings are made on the latest type of labor saving machinery by skilled mechanics. Only high qualities of heavy tin plate and heavy galvanized steel are used, and we have taken every precaution to provide pipe and fittings that will cause you no unnecessary work or trouble in using.



Safety Wall Pipe.

Double Wall Pipe, Adjustable Joints.

Notice the double wall pipe shown above. It is put up in lengths from 2 inches to about two feet. Each section is furnished with slip and socket ends. By using the two-foot section in connection with the shorter lengths any length can be made without the necessity of cutting and at the least possible expense for installation. A special adjustable stack joint is also furnished for each wall stack so that length of stack can be adjusted to exact point required. This simplifies the installation very much. This pipe being constructed with an air space between its walls prevents the loss of heat and overcomes any possible danger of fire, as the outer surface of the tin pipe is at all times cool, owing to the current of air between it and the inner pipe. This pipe costs a little more than common single wall pipe, but when its advantages are taken into consideration, together with the absolute protection from fire which it affords, it is decidedly the cheaper. It is entirely unnecessary to cover this pipe with asbestos, as the air space is far superior to asbestos wrapping.

We have on hand at our factory a complete line of angles, offsets, elbows, boots, heads and all other fittings required to make a perfect job of piping to any room, no matter where it is located. The wall pipe is made in various sizes, and we carefully select just the one required for the different rooms to be heated, guaranteeing that the proper amount of heat will be delivered through every pipe.

Round Basement Pipe.



Fifty Foot Pipe, All Sizes Nested.



Pipe Before Being Locked.

Our round tin pipe is smooth, straight and perfectly made, so that it will go together without any trouble. It is packed solid in a roll. Each section is formed and shaped all ready to be locked in position and connected up with the furnace. There is no soldering to be done and no special tools are required. Each joint of pipe is uniformly crimped at one end, so that it will easily and snugly fit into the next section and really makes one continuous piece of pipe after it is put together. The sections are about 2 feet in length. By shipping this pipe packed solid in a bundle it takes a much lower freight rate, and the saving is entirely yours. The made up pipe in long sections makes necessary the use of large bulky crates that are hard to handle and expensive to make. We can furnish the made up pipe to anyone who prefers it, but unless otherwise specified we will send you our pipe, put up in convenient solidly packed bundles that cannot be mashed, dented or damaged while being shipped.

We can furnish round galvanized pipe for return air ducts made in the same way and shipped in small, compact, handy packages. Even the large sizes are now shipped as easily as small 8-inch pipe, whereas heretofore the made up pipe necessitated very large, bulky crates. We furnish this galvanized iron return air pipe to those who want it, but a wooden duct made of matched flooring boards is just as good and considerably cheaper.

Selecting Registers, Furnace Pipe and Fittings.

For the convenience of those who desire to add to a warm air system already installed, or replace worn out material, we will gladly submit a special estimate. If you intend installing a complete system, do not attempt to select the registers and fittings yourself, unless you are thoroughly familiar with the sizes required. The size of registers, pipe and fittings should be scientifically figured, and, for this reason, we cannot guarantee the operation of a system unless figured or verified by our heating engineers. To ascertain the cost of a Hercules Warm Air Plant of the proper size for your building, fill in the plan blank enclosed in this catalog and send it to us for an estimate. We make no charge for this service.

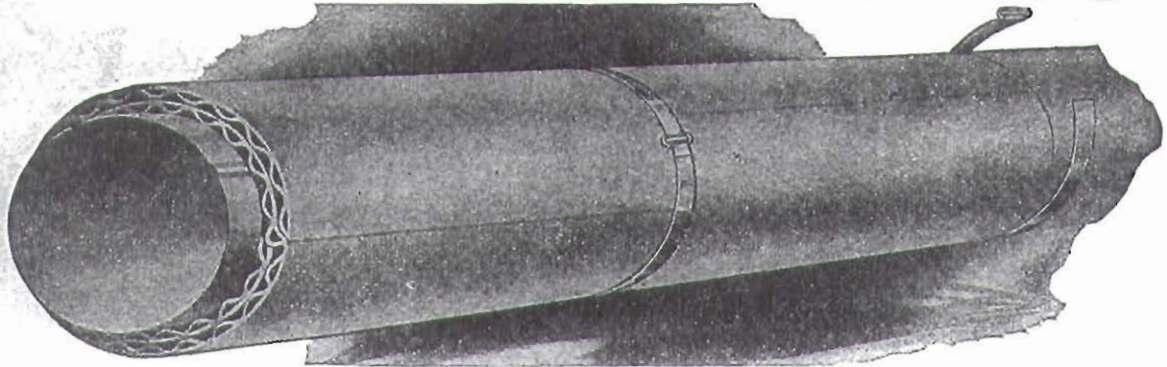


Bundle of Pipe Ready for Shipment.



Showing Pipe With Seam Locked.

"Insultite" Covering for Furnace Pipes



Saves Its Cost in One Winter by Reducing Heat Loss From Pipes in Basement

The best known non-conductor of heat is entrapped or confined air. A common illustration is found in the practice of building houses with hollow walls to make them warmer. In making our "Insultite" Corrugated Asbestos Covering we use two sheets of heavy asbestos paper, one corrugated and the other smooth, the two sheets being cemented together with a fireproof compound. The corrugations are about 1/4 inch deep and quite stiff, permitting the "Insultite" covering to be readily made into rolls for shipping, without danger of crushing.

One layer of "Insultite" Asbestos Covering around a furnace pipe will prove to be a very effective insulator, but we always specify two layers, for in the double thickness there will be about 1/2 inch of entrapped air space, which will cut down the heat loss to a minimum. Pipes wrapped with a double thickness of "Insultite" may be run through the vegetable room in the basement with perfect safety to your winter stores.

Applying "Insultite" is very simple. Cut off a strip from the roll long enough to go twice around the pipe and put it on, pasting down the end with our Asbestos Paste 42PK195, listed on this page, or any good floor paste. Repeat the process and put on the next section. Then cover the joint between the two sections with one of the bands which come with the "Insultite," drawing it up tight and bending the end over to hold it. At the elbows and angles the covering will have to be cut to fit, but this can be easily done with a common pair of scissors.

"Insultite" is put up in rolls 36 inches wide, containing 250 square feet. One roll will cover from 40 to 50 lineal feet of furnace pipe, two thicknesses. We do not ship less than full rolls. When ordering specify size pipe to be covered. Shipped from factory in OHIO. Weight, per roll, crated, 80 pounds.

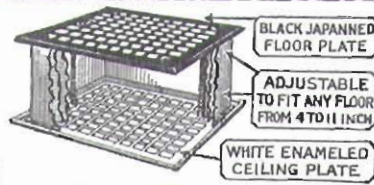
42PK4050 1/2 - Per roll\$5.25

Asbestos Paper

A fireproof material, made of natural mineral asbestos fibers reduced to a pulp and spread out into a sheet of uniform thickness. It is very soft and pliable and is easily cut with a common pair of scissors. It is usually applied with starch paste, or the special Asbestos Paste listed below.

In addition to covering furnace pipes, asbestos paper is used for covering walls, partitions and ceilings exposed to heat, and as a lining for floors and ceilings. It comes in rolls 36 inches wide. Shipped from our store. Prices subject to market changes.

42PK193-10-yard roll. Shipping weight, 10 pounds.....\$1.00
42PK194-50-yard roll. Shipping weight, 50 pounds.....\$3.95



\$3.75 10 x 12 In.
Combination Floor and Ceiling Register and Ventilator for Pipeless Furnace Heating

Used with Pipeless Furnaces. Carries heat from room below to heat room above. Lets heat circulate to second floor. Adjustable to fit any floor or ceiling from 7 to 11 inches apart.

Catalog No.	Size, Inches	Shpg. Wt., Lbs.	
89PK2118	8x10	9	\$2.65
89PK2119	10x12	11	3.75
89PK2120	12x15	15	6.95

Asbestos Furnace Cement



Consists of pure mineral asbestos fibers ground and pulverized and compounded with other fireproof materials. This cement is soft and easily worked with a putty knife when fresh, but quickly hardens when exposed to the air, and when heated becomes almost as hard as the iron on which it is used. It makes the joints in a furnace or stove gas and smoke tight.

42PK192-Per 5-lb. can...45c

Galvanized Expansion Tanks

Used on hot water heating systems to provide for expansion and contraction of water. Strongly made of steel, galvanized inside and out. Prices include water glass complete with brass elbows and guards, but not the inlet and outlet fittings shown. Size of inlet and overflow, 1 inch.



42PK1800A

Size, Inches	Sq. Ft. of Radiation	Weight, Pounds	Including Gauge
10x20	320	31	\$ 7.50
12x20	400	40	7.80
12x30	600	48	8.55
14x30	800	60	11.40
16x30	1,040	74	12.60
16x36	1,280	88	13.65

Adjustable Nickel Plated Ceiling and Floor Plates

Can be placed on the pipes after they are in position.

42PK120

Size, inches	Shpg. wt., lb.
1 1/4	1 1/2
1 1/2	2
2	3
2 1/2	4
3	5
3 1/2	6
4	7
4 1/2	8
5	9
5 1/2	10
6	11
6 1/2	12

Altitude Gauge
For showing height of water in hot water heating plant. 3-inch black finished case, contracted dial, easy to read. Shipping weight, 4 pounds.
42PK146\$1.45

Low Pressure Single Spring Gauge. For house heating boilers, steam cookers, etc. 3-inch black finished case. Contracted dial, easy to read. Indicates to 30 lbs. Shipping weight, 4 pounds.
42PK148.....\$1.50

Siphon Automatic Air Valve
Here is a valve that you can depend upon to open and close at the proper time and keep the radiators on your steam heating plant operating at all times to their highest efficiency. No more air trapped radiators. Cannot become water logged. Saves fuel.
42PK119-Shipping weight, 6 ounces.....65c

Compression Air Valve Only Without Key
Solid brass, nickel plated. Shpg. wt., 2 oz.
42PK115 Size, 1/2 inch...7c
42PK117 Keys only...4c

AIR CELL ASBESTOS PIPE COVERING

Reduce Your Coal Bills and Improve Your Heating System by Covering the Boiler and Pipes. This Covering Easily Pays for Itself in Two or Three Seasons by the Great Saving Which It Makes in Your Fuel Bills.

Cold Water Paste.
For Applying Pipe Covering

For pasting down canvas flaps on Air Cell pipe covering. Used also for pasting asbestos paper to tin furnace pipes on warm air heating systems. Simply mix with cold water and use. Comes in 2 1/2-lb. packages.
42PK195-Per pkg.....35c

Asbestos Cement
For covering heating or power boilers, galvanized range boilers, smoke pipes and elbows and tees on heating systems, etc. Prevents loss of heat. Pays for itself in one or two seasons. Composed of asbestos fiber and a cement ordinary plaster to a thickness of about 1/2 in. Comes in 100-lb. bags. One bag covers about 11 square feet to a thickness of about 1/2 in.
42PK196 1/2 - Per bag...\$1.65
Shipped from factory in PHILADELPHIA, PA.



Air Cell Asbestos Pipe Covering

For covering pipes on heating systems, also cold water pipes to prevent freezing. Easily applied after pipes are in place. Sold only in 3-foot lengths, 1 inch thick. Shipped from factory in PHILADELPHIA, PA.
42PK4046 1/2

For Pipe Size, In.	Shpg. Wt., Lbs.	Per 3-Ft. Lgth.	For Pipe Size, In.	Shpg. Wt., Lbs.	Per 3-Ft. Lgth.
1/2	1 1/2	24c	2	3 1/2	49c
3/4	2	27c	2 1/2	4	46c
1	2 1/2	30c	3	4 1/2	50c
1 1/4	2 3/4	33c	3 1/2	5	56c
1 1/2	3	37c	4	5 1/2	67c

Hot Water Thermometer

For hot water heating systems. Indicates temperature up to 260 degrees Fahrenheit. Has 1/4-inch pipe thread. Shipping weight, 1 1/2 pounds.
42PK10880c

Steam Radiator Valves

Nickel plated brass with ground joint union and Jenkins disc.
42PK114

Size	Shpg. Wt.	
1/2 in.	1 1/2 lbs.	\$1.00
3/4 in.	2 1/2 lbs.	1.20
1 in.	3 1/2 lbs.	1.55
1 1/2 in.	5 lbs.	2.00
2 in.	8 lbs.	3.50

Hot Water Union Elbows

Nickel Plated Brass Union Elbows for hot water radiators.
42PK112

Size	Shpg. Wt.	
1/2 in.	1 1/2 lbs.	\$0.47
1 in.	2 lbs.	.60
1 1/2 in.	2 1/2 lbs.	.79
2 in.	3 1/2 lbs.	1.00
2 1/2 in.	5 lbs.	1.90

Hot Water Radiator Valves

Solid brass, nickel with union; one-half turn opens valve to full capacity.
42PK110

Size	Shpg. Wt.	
1/2 in.	2 lbs.	\$0.88
1 in.	2 1/2 lbs.	1.07
1 1/2 in.	3 1/2 lbs.	1.37
1 3/4 in.	4 lbs.	1.74
2 in.	6 lbs.	3.00

No Winter Too Cold With a HERCULES

Economical in Fuel

The greatest amount of heat per pound of fuel—that is a claim we make for our Hercules Pipeless Furnace, a claim that is justified by thousands of satisfied users of this wonderful furnace. The heat is delivered to your rooms almost instantaneously, without passing through any long system of pipes. Your basement will be cool—in fact, cool enough for vegetables. That means that all the heat will go upstairs where you want it. None of it will be wasted. For every shovelful of coal you put into this furnace you will get big returns in actual heat units in your rooms. It is really remarkable how our Hercules Pipeless Furnace circulates the heat to every room in the house and the great amount of heat it gives forth from such a surprisingly small amount of fuel.

It Has All Modern Improvements

Our Hercules Pipeless Furnace embodies the most advanced improvements in pipeless furnace design. Cold air is taken from upstairs, it enters the large register at the sides, drops down, and turns up under the inner or sub-casing near the base of the furnace. It then strikes the hot surface of the furnace and is carried up through the sub-casing and is discharged through the center of the large register above.

Thus a constant circulation of warm moistened air is maintained throughout the house. All health authorities agree that air in circulation is the most healthful. This healthful warm air rises up the stairway or through ceiling registers, which may be provided, to the second floor and every room is kept comfortably warmed in coldest winter weather.

EASY PAYMENTS
if You Wish

—10—

Big Advantages

- 1—No more smoke, dust or gas in your living rooms or carrying coal and ashes over your rugs and carpets.
 - 2—No putting up and taking down the outfit every six months.
 - 3—Costs little more than old time heating methods and burns no more fuel.
 - 4—Easy to install and to operate.
 - 5—Only one fire to attend to.
 - 6—Constant circulation of air keeps all rooms evenly and comfortably warmed.
 - 7—Gives you more space in your living rooms.
 - 8—You can put a water coil in the furnace and you will then have a plentiful supply of warm water for bathing, shaving or washing all winter long at practically no extra expense for fuel.
 - 9—The plumbing pipes in the basement or walls of your building will not freeze, yet the basement will be always cool enough for vegetables, preserves, etc.
 - 10—Our liberal guarantee assures you of absolute satisfaction.
- Why pay more when you can buy the genuine Hercules at these money saving prices?

Quality Counts in the Long Run

Quality is the big feature of our genuine Hercules Pipeless Furnace. Don't forget that.

You may be sure that when you select a Hercules Pipeless Furnace, you are getting the very best that money can buy.

If you would compare our Hercules Pipeless Furnace with competitive furnaces selling at about the same price, or even higher prices than we ask for this high grade article, you would immediately see the superiority of the Hercules.

In the Hercules furnace, there are no skimmed sizes, no light weight castings, and no saving of material to cut down the cost.

The furnace inside the casing is full size. The radiator is extra high and extra large, the fire dome is high and roomy, giving ample space for combustion of the fuel, and providing abundance of heating surface. The fire door is amply large to accommodate large chunks of wood, the firepot castings are heavily corrugated to increase the heating surface.

The workmanship at every point is perfectly executed and all doors and working parts are ground to a perfect fit.

Valuable Accessories for Your Furnace are Shown on Page 29

Any Handy Man Can Easily Install It



Our Hercules Furnace has a heavily constructed, heavily corrugated fire pot which insures greater durability and heating efficiency. Hercules Furnace casings are made from accurate patterns and they fit perfectly.

Extra high and extra large radiator; high ribbed fire dome; extra large flue door.

A most important feature of our Hercules Pipeless Furnace is the heatproof casing. A big factor in keeping down your coal bill. Casings are split and are drawn together with lugs and bolts, making it a very simple matter to install this furnace.



Install the Hercules and you will enjoy real winter comfort.



Oxidized copper disk plate with necessary chains and pulleys is included with each furnace. Permits you to operate dampers from upstairs.

BURNS ANY KIND OF FUEL



Figure up total cubic contents of your building, select a furnace of corresponding capacity from table on this page.

If you live in a real cold climate, or your house is unusually hard to heat; if you want to keep your house unusually warm, or if you will burn wood or soft coal, we would recommend ordering a furnace one size larger. It is always better to have a furnace a little larger than is actually required.

The 18-inch fire pot furnace makes an excellent furnace for small houses, bungalows, etc., but is not recommended for houses having more than five rooms.

If you prefer we will estimate the size furnace you require for your building. USE OUR SPECIAL HEATING INFORMATION BLANK, fill it out carefully and return it to us. Our engineers will advise you the correct size furnace needed to heat your building and we will also advise you what the freight will amount to if you wish us to do so.

Shipped from Philadelphia Pa. Eastern Ohio or Springfield Mass. Which Ever is Nearest You

Prices of Hercules Pipeless Furnaces

Prices are for furnace complete with register, casing, shaker handle, poker, check draft, chains, pulleys, damper chain plate and cement. Furnace is adapted for any height of basement up to 7 feet. Extensions for higher basements furnished at extra charge.

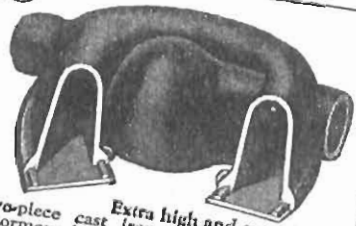
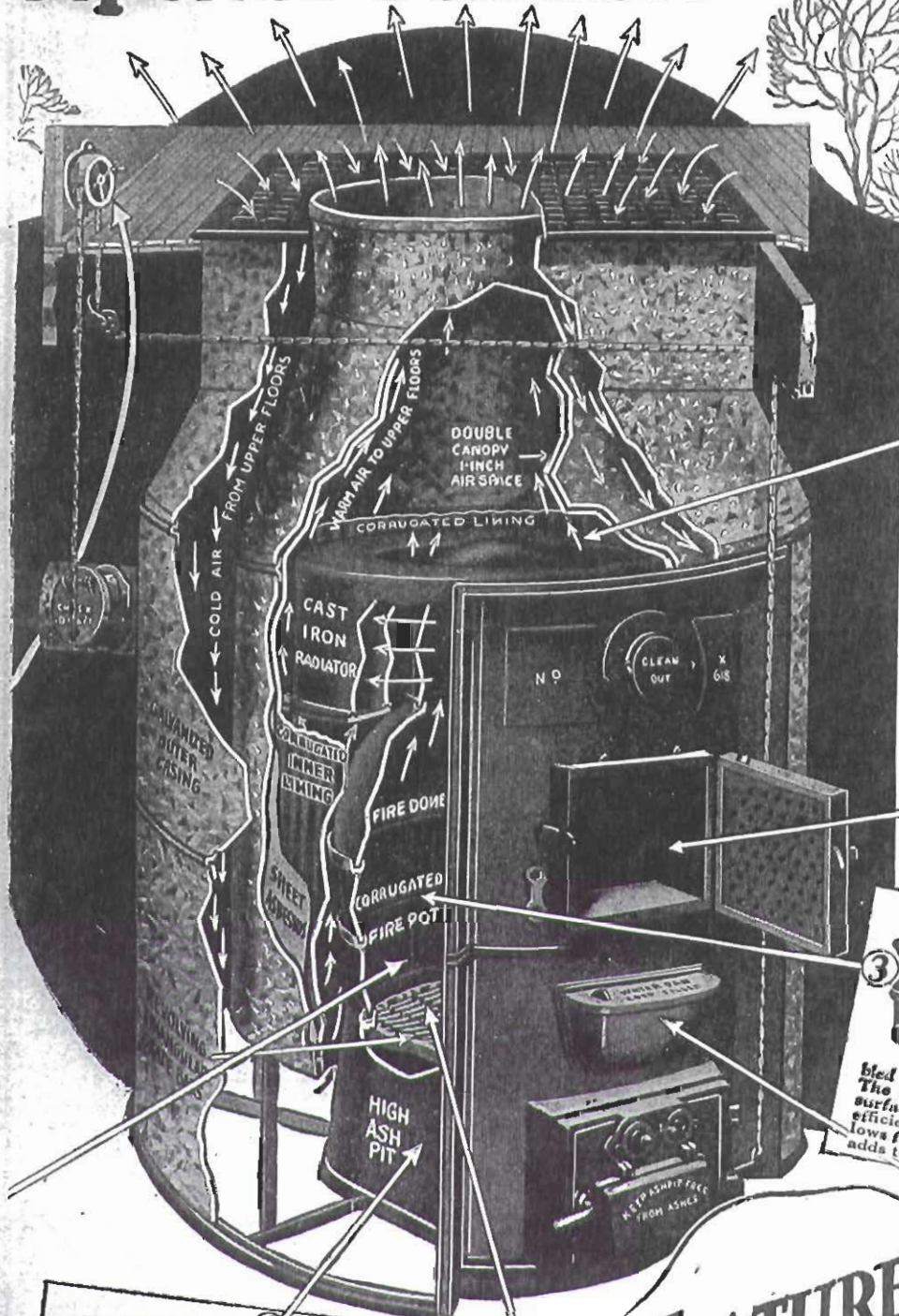
Catalog No.	Diam. Fire Pot, Inches	Heating Capacity, Cubic Feet	Diam. of Outer Casing, Inches	Size of Feed Door, Inches	Diam. of Smoke Pipe, Inches	Shpg. Wt., Lbs.	Cash Price	Price on Easy Payments
42K3890 1/2	18	10,000	40	9 x 12	7	900	\$ 61.75	\$ 68.00
42K3900 1/2	20	14,000	42	10 1/2 x 12 1/2	8	1,060	72.85	80.50
42K3901 1/2	22	20,000	45 1/2	11 x 13	8	1,250	88.75	97.50
42K3902 1/2	24	28,000	49	11 x 13	8	1,420	104.95	115.50
42K3903 1/2	26	40,000	52	10 1/2 x 12 1/2	9	1,850	119.75	132.00

EASY PAYMENT TERMS—Ten Dollars Down and Ten Dollars per Month

Prices are subject to market changes. If ordering on easy payments fill out Time Payment Order Blank enclosed with this catalog. To take advantage of our easy payment offer it is necessary that you hold title to the building in which the furnace is to be installed. Smoke pipe not included at above prices. For smoke pipe, hot water coil and wood burner grate, see page 29. If wanted with Gas Burner in addition to coal grate, write for prices. Combination floor and ceiling registers, used to permit warm air to pass up through first floor ceilings to second floor rooms, are listed on page 31.

Pipeless Furnace

\$ **61.75**
CASH PRICE



1 Extra high and extra large enormous heating surface, which provides a big saving in fuel. Radiator is assembled with deep tongue and groove joints well bolted and cemented.



2 Notice the high ribbed fire dome, providing ample space for proper combustion. Fire door is large enough to take large chunks of wood or coal.



3 The fire pot of the Hercules is made of high grade cast iron in two pieces. It is heavily corrugated and assembled with deep tongue and groove joints. The corrugations increase the heating efficiency, thereby adding to the heating power. Two-piece construction adds to durability.



6 The ashpit is unusually high, reducing the possibility of excessive accumulation of ashes, causing the grate bars to burn out. Has a cast iron bottom.



5 The grate bars are triangular in shape and revolve in pairs. Clinkers are easily ground up and discharged into the ashpit. Grate bars are heavily constructed for greatest durability.



4 A large cast iron water pan is mounted in the furnace front directly under the fire door, providing an abundance of moisture at all times to the circulating air as it passes through the furnace.

FEATURES
That Mean
Real Service!