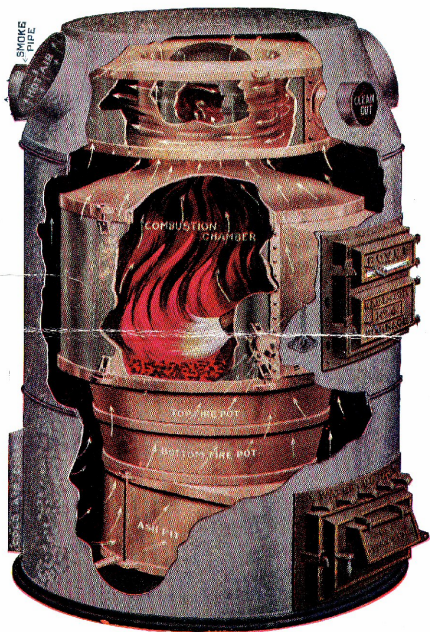


Bovee Furnaces

21st ANNUAL CATALOG



BOVEE'S UPRIGHT FURNACE

Heats a given space with 10 per cent less fuel than required by other furnaces

Bovee Furnace Works

WATERLOO, IOWA

BOVEE'S PIPELESS FURNACES

We manufacture a full line of Pipeless Furnaces both cast iron and steel, of suitable sizes to heat any house from a cottage to a church. No family can, now, afford to be without a first-class heating plant. All dust and dirt from fuel is kept in the cellar.

Cost No Greater Than Stoves

The cost is no more than stoves to furnish an equal amount of heat.

Easy to Install

There is but one register to cut in the floor. They are very quickly and easily installed.

Especially Adapted to Modern Cottages

A Pipeless Furnace works better where there are large openings between rooms and an open stairway, where the air can easily pass from room to room.

Adapted to Old Houses

No cutting of walls for piping. Just place the furnace under the main room and leave all doors open and the warm air will circulate through all parts of the house.

Basement Always Cool

As there is no piping and the cold air comes down inside the casing, the basement is always cool and will not damage vegetables or fruit, where placed in the same room.

Send Pencil Sketch of House

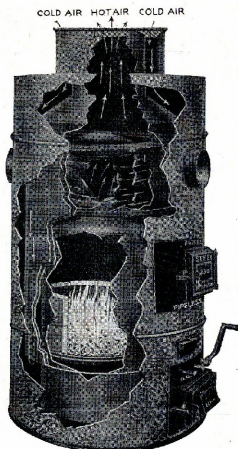
We do not recommend the Pipeless Furnace for a house it will not properly heat. We can quickly tell on receipt of a pencil sketch of the building.

Gentlemen:

The furnace that I have is giving excellent satisfaction. I am also building a new house and expect to install a furnace, but have been thinking of your Pipeless kind. This looks to me as about the right wrinkle in a furnace.
H. E. Dawes, Fulton, S. D.

Gentlemen:

I received your furnace last December and set it up myself in my ten room house, and will say I was more than surprised with the results for I was a little afraid the single pipe furnace would not warm the whole house, but it did splendidly. We had no difficulty at all in keeping the house warm as we wanted it. We gave it as hard a test as we are likely to do for some time.
Very respectfully,
A. W. Dibble, Flandreau, S. D.



The Steel Pipeless Furnace

This has heavy steel combustion chamber and circulating radiator and the fire-box lined with fire-brick, making it very durable and a very quick heater. Made in two sizes, 21 and 24-in. fire-pot.

Dear Sirs:

We are very much pleased with our furnace, which we received from you. It is certainly a money-saving furnace, and we would not sell it for anything.

Yours respectfully,
Hulda M. Anderson, St. Croix Falls, Wis.

Dear Sirs:

I have used your furnace the past winter, and can say it sure is a fine thing. We could not do without it. You couldn't get a furnace to do better work, and it costs no more to operate than a hard coal burner.

Yours respectfully,
R. H. Boody, Hudson, Wis.

Twenty-One Year's Experience

Manufacturing the Bovee Furnaces

This long experience in manufacturing and installing the **Bovee Furnaces** and in their use in all kinds of buildings with all kinds of people and under all circumstances with many thousands of furnaces, enables us to manufacture the very best furnaces that can be made from the best material that can be secured.

We manufacture four distinct lines of furnaces. The **Bovee Upright**, the **Bovee Horizontal**, the **Bovee Cast Iron** and also the **Steel Furnace**, each being especially adapted to some especial class of use. The **Bovee Cast Iron Furnaces** are especially adapted to a low basement. They are heavily and compactly built in all sizes up to a 32-inch fire-pot, and stand only four and one-half feet high. They are very durable and burn all kinds of coal or coke.

The **Bovee Upright Furnace** actually has greater heating capacity than any other furnace of same sized fire-pot. This is due to the very large radiator about one foot larger than the fire-pot. This gives an easy circulation of all the heat into the air chamber and saves practically all of the heat. It is easily seen that the large radiator will secure more heat from the same fuel. The **Bovee Ventilating System** continually removes the foul air coming in through the cold air ducts and fresh air comes in to replace it, furnishing pure air to every part of the house.

The **Bovee Horizontal Furnace** is used for burning either wood or soft coal, and has very large doors, 16-in. x 16-in.; or 17-in. x 21-in. doors can be furnished when ordered, making it very convenient for burning large rough wood, and saving a large part of the expense of cutting and splitting. These furnaces are used extensively for farm use, as they not only burn all kinds of wood, but are very economical and convenient for burning any kind of soft coal. They are very easy to operate, and are very durable and economical of fuel, having large radiating surface, with return circulating radiator. They are all furnished with coal grates.

All of our **Steel Furnaces** have a combustion chamber extending clear to the bottom of the ash-pit, and enclose everything, and have the rocker shaker grates, with fire-box lined with fire-brick that can be easily changed through the door of the furnace. The heat when leaving the combustion chamber goes into a return circulating radiator, and circles around each way before reaching the chimney, giving a long travel to the heat.

With the **Bovee Pipeless or Central System** of piping we use our cast iron furnaces, except when especially ordered we can furnish either the **Steel Furnace** or our **Upright Furnace**. The **Pipeless System** works well in houses having large openings and open stairways, allowing the heat to be properly distributed, but in houses having small doors between the rooms it is better to use separate pipes, usually from different rooms.

Bovee's Central Heating System. With this we use any of the **Bovee Furnaces**, either **Upright or Horizontal**, with one large register over the furnace and return the cold air through separate pipes, usually from different rooms.

Our long experience has enabled us to make, we firmly believe, the very best and most practical hot air furnaces on the market. This vast experience also enables us to know just the best style of furnace and piping for any kind of building, and just how to locate everything connected with the entire plant to save fuel and give the most satisfactory results.

Look Right into This Furnace and See Why The Bovee Upright Furnace

WILL SAVE YOU ONE-THIRD OF YOUR FUEL BILL

and Last Much Longer Than Any Furnace You Can Buy

1. **The Independent Rocker Shaking Grates**, easy to operate, never clog with cinders, and in mild weather it is only necessary to shake one or two, allowing the ashes to remain on the others, giving the same effect as a small fire pot that would only hold a hod of coal. With these grates the fuel burning capacity can be regulated exactly to suit.

2. **Heavy Cast Iron Fire Pots**, made in two sections—the most durable and largest radiating capacity in use.

3. **The Large Double Doors**—Only one or both can be opened as desired.

4. **The Large Combustion Chamber**, almost a foot larger than the fire pots. It is the combustion chamber that radiates the heat and the fire pot that burns the fuel and the larger the combustion chamber in proportion to the fire pot, the less fuel will be consumed to produce a given amount of heat.

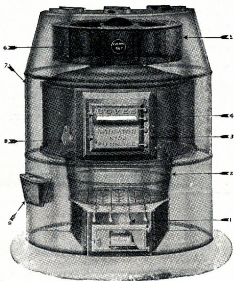
5. **The Compound Circulating Radiator**—The heat enters this radiator at the center and circulates around both ways before entering the smoke flue, giving a long travel to the heat, and securing the utmost amount of heat from the fuel consumed.

6. **Clean Out**—This clean out opening extends through the casing and through the circulatory radiator can be cleaned in two minutes, without stopping fire. This allows the radiator surface to be kept as clean of soot as when new.

7. **Large Galvanized Iron Casing**, made double. With this large casing the air never becomes overheated and the air is balmy as June.

8. **Hot Blast Ventilating System** gives fresh air to every room in the house, burns the smoke and gives a quick, healthy circulation to all the air in the building.

9. **Water Evaporation Pan** supplies moisture to every room in the house, advantage that cannot be secured by steam or hot water plant.



Bovee Upright Furnaces

(See Illustration on Front Cover Page)

Twenty Years Experience Enables Us to Make the Very Best

Look Right Into This Furnace

A Sure Foundation

A Clean Heating Surface

The Large Combustion Chamber Saves Forty Per Cent of the Fuel

The Return Circulating Radiator, With Six Heating Surfaces

The Most Possible Heat From Fuel Consumed

Careful Measurement Proves the Superiority of the Bovee Furnace as Sure as Measurement Gives the Capacity of a Steam Engine

In our Upright Furnace we have, by **Twenty Years Experience**, been able to produce a hot air furnace having the greatest durability, and **Actually Using Much Less Fuel** to produce the same amount of heat than other furnaces.

A careful examination of the X-Ray cut shown on the preceding page will show why this can be done.

Note the large ash pit with a clean, independent shaking grate surface, with which it is very easy to keep the fire in a condition for perfect combustion of the fuel.

From the **Top of the Ash Pit Clear to the Smoke Collar** there is a **Clean Heating Surface**, commencing with the heavy cast iron fire pots made in two sections, which is a splendid heating surface.

The **Combustion Chamber** is about **One Foot Larger** than the fire pot, it is all a direct heating surface, and always free from soot, and is more than twice as large in comparison to the fire pots as the combustion chambers of other furnaces. As it is the **Fire Pots That Consume the Fuel** and the **Combustion Chamber That Radiates the Heat**, this large combustion chamber in many instances doubles the heating capacity of the fuel used.

After the heat leaves this large combustion chamber it enters the return circulating radiator having **Six Heating Surfaces**, and having a sheet of fire between two sheets of cold air, and a sheet of cold air between two sheets of fire, thus having a long travel and securing practically all of the heat before reaching the smoke pipe.

The whole construction of the Bovee Upright Furnace is: First, to secure the utmost heat possible from a small consumption of fuel; and second, to secure great durability; both of which our twenty years of experience has proven to be exactly correct.

Careful Measurement of the Bovee Upright Furnace in comparison with all other furnaces will show its great superiority.

SIZES AND CAPACITY

Size	Casing	Height	Fire Pot	Heating Capacity
No. 40—40 in.	42 in.	26 in.	6,000 to 8,000 cu. ft.	
No. 45—45 in.	47 in.	28 in.	8,000 to 12,000 cu. ft.	
No. 50—48 in.	54 in.	28 in.	10,000 to 15,000 cu. ft.	
No. 55—52 in.	64 in.	29 in.	14,000 to 20,000 cu. ft.	
No. 60—54 in.	65 in.	32 in.	25,000 to 45,000 cu. ft.	
No. 65—56 in.	68 in.	36 in.	30,000 to 60,000 cu. ft.	

Bovee's Horizontal Radiator Furnaces

(See Illustration on Back Cover Page)

The most perfect wood and soft coal furnace used. Large double doors, sixteen inches square (17x21 inch doors can be furnished when ordered). These furnaces are especially adapted for FARM USE, as they admit large blocks of coarse wood, cobs and lumps of coal and other coarse fuel. They will burn 52-inch wood.

The large grate surface causes perfect combustion, which effects a great saving in fuel. The heavy independent rocker shaker grates are very easy to operate in burning coal.

The very large combustion chamber and compound radiator, which causes the heat to travel three times the length of the furnace before reaching the smoke flue, secures practically all of the heat from the fuel consumed, and no kind of heating plant can be more economical than that.

They are made of heavy steel plate with cast heads and the fire box lined with fire brick, making them the most perfect, economical and durable furnaces sold. Only one retort joint to connect in mounting the whole furnace.

We Manufacture the Horizontal Furnace in Four Sizes, as Follows:

Size	Firebox	Height	Heating Capacity
No. 30	28x30 in.	58 in.	8,000 to 10,000 cubic feet
No. 36	28x36 in.	58 in.	10,000 to 15,000 cubic feet
No. 48	28x48 in.	58 in.	15,000 to 25,000 cubic feet
No. 54	30x48 in.	66 in.	25,000 to 60,000 cubic feet

These Furnaces are all shipped with 16x16 inch doors.

Nos. 30, 36 and 48 can when so ordered be furnished with doors 17x21 inches.

We do not hesitate to claim this the best line of Horizontal Furnaces ever placed on the market, and it is only by manufacturing in large quantities, by the most improved methods, that we can sell them at a cost equal or less than that of stoves for heating the same space.

Our long Experience enables us to locate a heating plant to the very best advantage. We ship furnace and fittings prepared so that any man at all handy with tools can install this furnace without any assistance of a tinner.

Dear Sirs:

Our home used the Bovee Horizontal Furnace for five years and we think there is none better for giving good heat and also saves on the coal bill.

Yours respectfully,
H. Hynes, So. Rock Island, Ill.

Gentlemen:

We have been using one of your No. 3 Compound Horizontal Furnaces for the last three winters and am glad to say it is very satisfactory and can recommend this furnace to anyone wishing a good furnace.

Yours truly,
Elmer E. Place, Albion, Neb.

Gentlemen:

I received your letter of May 14. Will say it gives me great pleasure to speak a word of commendation for the Bovee Furnace. Our furnace, No. 48, has given great satisfaction. We have used it two years and is apparently in as good condition as when first installed. Will be pleased to speak to any of our neighbors whom we know to be considering the purchasing of a furnace.

Respectfully,
A. A. Smiser, Spring Hill, Kan.

Gentlemen:

I have used one of your Horizontal Furnaces for several years, and like it. If I were buying another it would be a Bovee.

Very sincerely,
H. W. Lowers, Spring Hill, Kan.

Gentlemen:

I have used one of your No. 3 Horizontal furnaces seven winters and as far as the furnace is concerned am much pleased with it. I think it is the best furnace for farmers' use, especially.

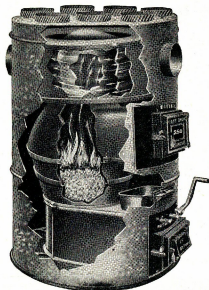
Yours truly,
E. E. Barstie, Glen, Minn.

Gentlemen:

The furnace I bought of you is better than I expected as there were several persons tried to discourage me in buying a furnace. Instead of a stove I got your No. 36 Horizontal. I use fuel mostly that can't be burned in a stove. Saves much labor in cutting wood.

Yours respectfully,
B. G. Tolbooy, Carlisle, Ia.

Bovee's Cast Iron Furnace



This is a very durable, economical and easy furnace to operate. Has large ash pit with independent rocker shaker grates, heavy cast iron fire pot, made in two sections, cast iron combustion chamber and a heavy cast iron circulating radiator, giving it very large heating capacity and great durability, it has very large convenient doors and makes a practically perfect heating plant. A better cast iron furnace cannot be secured from any source.

We make this furnace in four sizes.

SIZES AND CAPACITIES.

Size	Fire Pot	Height Cased	Heating Capacity
No. 245	23 in.	56 in.	7,000 to 10,000 cu. ft.
No. 250	25 in.	56 in.	10,000 to 15,000 cu. ft.
No. 255	29 in.	56 in.	15,000 to 20,000 cu. ft.
No. 260	32 in.	56 in.	20,000 to 50,000 cu. ft.

Calamine, Wis., May 22, 1916.

Bovee Furnace Works,
Waterloo, Ia.

Gentlemen:

I must say that the furnace we installed some six years ago is working great. As yet we have not had any expense with it. It throws great heat and saves a big amount in the fuel bill comparing with others. I remain,

Yours truly,

A. W. Wiekler.

Dear Sirs:

I have used one of your Cast Iron Furnaces for two years and I consider it a complete success in burning any kind of fuel. It also governs in fine shape. Though it costs less money, it is as good in every respect.

With success to you, I am

Yours truly,

E. D. Barker, Little Cedar, Ia.

Gentlemen:

I have used one of your furnaces for six years and am fully pleased with it and the furnace heated my house last winter just as satisfactorily as it did when new. And would say that anyone desiring to install a furnace will do themselves a favor to correspond with you before buying.

Very respectfully,

John Nankel, Lancaster, Wis.

Gentlemen:

I have used one of your furnaces for seven years with no trouble or expense. I am well pleased. I don't ask for anything better.

Soren Hansen, Howells, N. D.

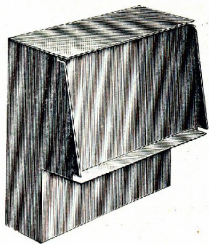
Dear Sirs:

I have used one of your furnaces since 1907, and I must say it gave the best of satisfaction in every respect, and cannot see anything yet for not being as good as new excepting one of the grates is warped some from the heat. Otherwise it seems as good to me as new, and the service it gives I don't think has more to equal it. I have seen a good many other ones since I have mine, but few as good as the Bovee.

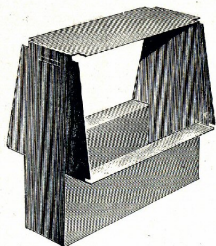
Your friend,

H. L. Bahne, New Haven, Mo.

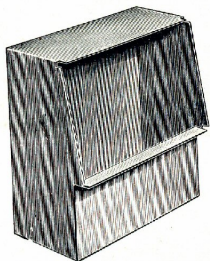
TIN FITTINGS



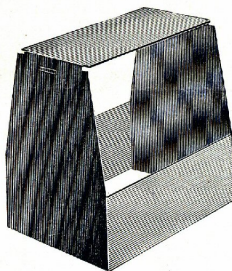
**Single Stack Head for
Second Floor**



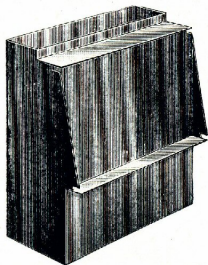
Double Stack Head for Second Floor



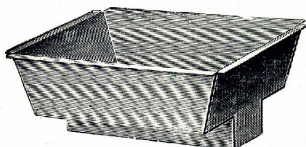
First Floor Single Head



First Floor Double Head

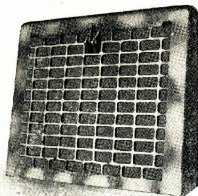


**Stack Head for First Floor
With Collar for Extension
to Second Floor**

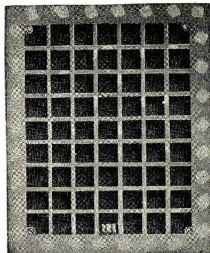


**Floor Register Box
for Riser Pipe**

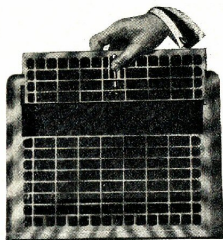
FLOOR AND WALL REGISTERS



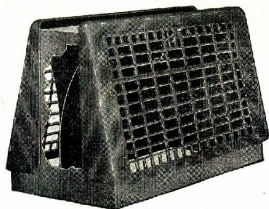
Acme Side Wall Register



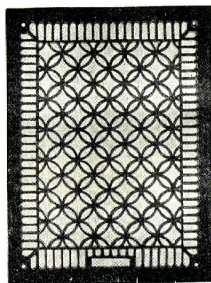
Semi-Steel Floor Register



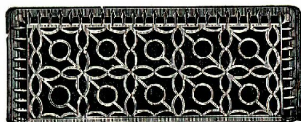
Carter Side Wall Register



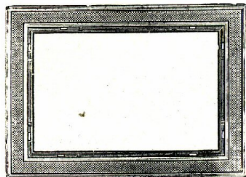
**Showing Double Head for Heating
Two Rooms on First Floor**



Cast Iron Cold Air Plate



Side Wall Cold Air Plate



Floor Register Boiler

Bovee's Central Heating System

One Large Hot Air Register directly over the Furnace with Separate Cold Air Returns.

Either UPRIGHT or HORIZONTAL FURNACES furnished with the CENTRAL HEATING SYSTEM.

Large Saving on Cost

In Bovee's Central Heating System We Use But One Large Hot Air Register directly over the furnace with two cold air returns from different rooms, except in a small house where only one cold air return is required.

Balmy Atmosphere

The very direct and short radiation of air with-in the furnace causes it to circulate with so little rise of temperature that it is never highly heated and always gives a perfect balmy summer effect.

Great Saving on Fuel

With the Central System of Heating there being no piping to obstruct the rise of the warm air, it is delivered instantly into the room and an equal amount of cold air is taken off the floor in the adjoining rooms in which the cold air registers are located. This in turn causes a vacuum in these rooms which must be supplied by the warm air coming out of the furnace. This causes all of the air in every part of the house to be at almost the same temperature all the time upstairs as well as down if there is an open stairway or if the stairway door is left open.

Just the Thing for Low Basement

This System Can be Used in a Very Low Basement as there are no pipes leading off under the joist. It can be installed in a five foot eight inch basement, also in a very small basement.

Can be Installed in Old House as Well as New

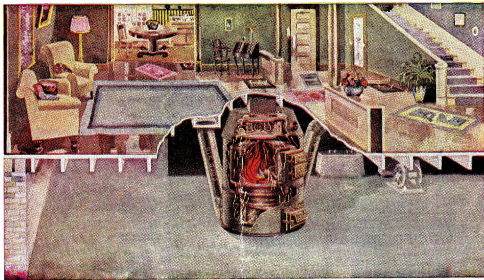
An Old House or any house not fitted when built with riser pipes can with this Central System be fitted with a first class heating system just as well as a new house.

One That Can Install a Stove Can Install This System

We ship furnace complete with galvanized casing, hot air register and connections; also all cold air registers, each with 6 feet of 14 or 16 inch piping with attachments at the bottom of furnace, the upper end to be connected to wooden cold air box under joist. Everything is properly prepared and no experienced furnace man is required. Any handy man can install the whole plant in first class shape in one day.

We furnish shovel, poker, chains and all accessories required.

BOVEE'S CENTRAL HEATING SYSTEM



1916 PRICE LIST

BOVEE FURNACES

Bovee's Pipeless Furnaces

WITH CAST IRON FURNACE

Complete Ready to Install, Including all Fittings

	Fire Pot Inches	Size Over All Inches	Height Inches	Price
No. 245	23	40	60	\$135.00
No. 250	25	45	60	150.00
No. 255	29	48	60	175.00

Bovee's Central Heating System

WITH UPRIGHT FURNACE

	Fire Pot Inches	Diam. of Casing Inches	Height Inches	Price
No. 40 Upright	21	40	60	\$136.00
No. 45 Upright	23	45	60	150.00
No. 50 Upright	25	50	60	160.00
No. 55 Upright	29	55	62	178.00

Bovee's Central Heating System

WITH HORIZONTAL FURNACE

	Fire Box Inches	Height Inches	Price
No. 30 Horizontal	28x30	58	\$150.00
No. 36 Horizontal	28x36	58	160.00
No. 48 Horizontal	28x48	58	178.00

Bovee's Upright Radiator Furnace

WITH CASING ONLY

	Fire Pot Inches	Diam. of Casing Inches	Height Inches	Price
No. 40 Upright	21	40	62	\$110.00
No. 45 Upright	23	45	62	124.00
No. 50 Upright	25	48	64	136.00
No. 55 Upright	29	52	64	150.00
No. 60 Upright	32	54	66	170.00
No. 65 Upright	36	56	68	200.00

Bovee's Horizontal Radiator Furnace

WITH CASING ONLY

	Fire Box Inches	Height Inches	Price
No. 30 Horizontal	28x30	58	\$120.00
No. 36 Horizontal	28x36	58	130.00
No. 48 Horizontal	28x48	58	140.00
No. 54 Horizontal	30x48	66	160.00

Bovee's Cast Iron Furnace

WITH CASING ONLY

	Diam. Fire Pot Inches	Diam. Casing Inches	Height Inches	Price
No. 245 Cast Iron	23	40	60	\$110.00
No. 250 Cast Iron	25	45	60	124.00
No. 255 Cast Iron	29	48	62	136.00
No. 260 Cast Iron	32	54	64	150.00

BOVEE FURNACE WORKS

WATERLOO, IOWA