GEO H HESS

STOVE ILLUSTRATIONS
FROM 1887 CATALOGUE

CIBSE Heritage Group
Warming and Ventilation

For

Public Buildings, Schools,
Halls, Stores, Dwellings, Etc., Etc.,

With a Description of the

Hess

"Pure Air" Furnaces,
Heaters, Cooking Stoves,
Ovens, Fire-Places; &c.

Manufactured by

The Hess Stove Works,
Geo. H. Hess Co'y, Proprietors.

Main Office & Salesroom:
286 Franklin Street.

Foundry and Works:
286 to 302 Franklin Street,
206 to 218 VanBuren Street

Chicago.
Hess Portable Steel Furnaces.

Nos. 51-2, 61-2, 71-2, 50, 60 and 70 Oval.

This style Furnace made in ten sizes, from 5 to 7 feet high. Hard Coal, Soft Coal or Wood. Burns Soft Coal without black smoke.

The indispensable conditions attached to a good furnace are a good chimney draft and a large combustion chamber. The ordinary furnace is very faulty. When the products of Combustion are flying off to the chimney at the speed of 30 feet a second, it must be clear that 50 per cent of the heat is lost.

American Athletic.
HESS "PURE AIR" TUBULAR STEEL FURNACE.
Nos. 4 A, 5, 6 and 7.
Hard Coal, Soft Coal, Coke and Wood.
BRICK SET AND PORTABLE.

This style of Furnace is made in Five Sizes, Nos. 40, 60, 100, 108, 120, arranged for Hard or Soft Coal or Wood. Soft Coal Screenings can be used successfully. We use "Rocking Grate Bars" in this style of Furnace. Can be set in Brick or Galvanized Iron Cases.
HESS
Pure Air
Ventilating
Stoves.
PURE AIR
Equalizers.

Nos. 1 and 2, 1887,
For Hard and Soft Coal.

Nos. 3 and 4, 1887, for Hard and Soft Coal.

No. 1, 1884,
Price, $17.00
For Hard Coal Only.

No. 3, 1883,
For Hard Coal Only.
Hess Pure Air Ventilating Heaters.

Nos. 4A, 5-6-7.

For Hard and Soft Coal.

Pure Air Circulators.

The larger sizes, Nos. 4 A, 5, 6 and 7, have round cases and are quite plain, being the interior of the Nos. 4 A, 5, 6 and 7 Furnaces. They have great capacity, and are very serviceable for large rooms, schools, churches, stores, halls and factories. When placed near the main entrance, to catch the cold air as it comes in, they will make any portion of a large room very comfortable. While other stove makers have attempted to do the same, none have been able to get such satisfactory results. All sizes of our ventilating Stoves and Heaters can be connected with out-of-door-air.

THE FURNACE HEATERS

Are constructed the same and of the same size as the furnaces of corresponding number, but with black cases in place of galvanized, and without a cap. Their advantage over the regular heaters consists in the entire absence of direct radiation, owing to the double cases, which allows seats or goods to be placed almost in contact—the radiant heat passing off in the circulation, and thereby increasing their capacity.

N. B.—We guarantee, with any of our heaters of proper capacity, to remove all frost from windows. The sale of these larger sizes increases yearly for use in stores where a display of goods in windows has become a necessity in business competition, and no merchant who has experienced the benefits of them would think of using anything else.
The "Monarch" Tubular Steel Furnace.

FOR HARD AND SOFT COAL

Powerful, Economical, Durable, Low in Price.

Especially adapted to this severe Western climate, which is subject to sudden and extreme changes to cold with high winds, when a furnace is called upon to do its utmost in an emergency, and without consuming a coal mine in the doing of it.

IT HAS IMMENSE RADIATING SURFACE.
The Hess Ventilating Grate and Open Fire-Place

**WITH FURNACE ATTACHMENT.**

For comfort, power, economy and elegance they have no equal. Lower in price than any competitor. Yield thrice as much heat. Consume but one-third the fuel, and hold fire all night. The only open fire-place heater that does not disturb the mantel, the wall or the floor, and is the only one with furnace attachment. It is the only one where the heat is not lost up the chimney.

**Cut Showing Style No. 1 as it appears in Wood Mantel.**

Various styles of Fenders can be used.

No. 1 can be furnished with square corners also.

Coal Basket, 19 1/2 inches; Frame, 30 1/2 inches wide by 32 inches high.

Opening required, 29 inches wide, 31 inches high, 17 inches deep.
Directions for Setting and Operating.

Ordinarily, the space between the face of a mantel and the back of the flue is from 18 to 24 inches and is filled up with brick and mortar to set the common grate. This is to be removed to a depth of 17 or 18 inches from the face of the mantel. The mantel usually projects 5 to 8 inches in front of the chimney breast, so there will always be found depth enough. The opening should be 20 inches wide, and the height for No. 1, 31 inches; for Nos. 2 and 3, 30 inches. The ventilating grates require the same opening though less depth.

The edges of the bottom, sides and top of the Galvanized Iron Case should be sealed with Plaster of Paris to insure against leakage of air, which would affect the chimney draft on the fire.

Any kind of fuel may be used. If hard coal, get range size. When the room is too hot, or when you desire to have a slow fire or hold fire over night, pull out the ring handle at the side. The under edge is notched and will stay at any point desired. This opens the door of the dust flue below the basket and checks the draft. In taking the fire or taking up ashes, if this door is opened, the dust will be carried up the chimney, thereby making this grate as clean as a stove. Every year the dust flue should be cleaned out through the door with a small scraper.

Cut showing Cross Section of Grate with Furnace Attachment. Hot Air Pipe to upper room, Cold Air Inlet and Ash Drum.