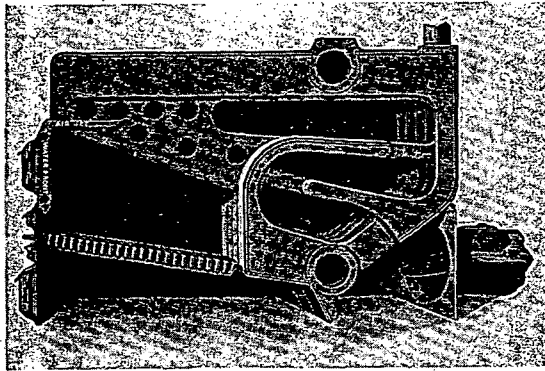


# Ironton Bernhard Boiler Co.

Ironton

Ohio

## BERNHARD TRIPLE COMBUSTION BOILERS



### The Consistent Boiler

The COMBUSTION from each Grate Bar being entirely taken care of in the Section directly above it, the same Ratio of GRATE Surface, FIRE Surface and FLUE Area is always maintained. Note how Gases Expand at three different points.

Smokeless Boiler with the Lowest Water Line

| Boiler No. | Steam Rating | Water Rating | Grate Surface Sq. Ft. | Flue Area Through Sections Sq. In. | Lbs. Steam per Hour | B.t.u. per Hour | Height Water Line | Flow Openings |
|------------|--------------|--------------|-----------------------|------------------------------------|---------------------|-----------------|-------------------|---------------|
| 20-5       | 600          | 1000         | 2.50                  | 42                                 | 150                 | 145,500         | 42"               | 2-3"          |
| 20-6       | 800          | 1300         | 3.33                  | 56                                 | 200                 | 194,000         | 42"               | 2-3"          |
| 20-7       | 1000         | 1650         | 4.17                  | 70                                 | 250                 | 242,500         | 42"               | 2-3"          |
| 20-8       | 1200         | 2000         | 5.00                  | 84                                 | 300                 | 291,000         | 42"               | 2-3"          |
| 20-9       | 1400         | 2350         | 5.84                  | 98                                 | 350                 | 339,500         | 42"               | 3-3"          |
| 30-6       | 1600         | 2500         | 5.00                  | 80                                 | 400                 | 388,000         | 42"               | 2-4"          |
| 30-7       | 2000         | 3250         | 6.25                  | 100                                | 500                 | 485,000         | 42"               | 2-4"          |
| 30-8       | 2400         | 3900         | 7.50                  | 120                                | 600                 | 582,000         | 42"               | 2-4"          |
| 30-9       | 2800         | 4550         | 8.75                  | 140                                | 700                 | 679,000         | 42"               | 2-4"          |
| 30-10      | 3200         | 5200         | 10.00                 | 160                                | 800                 | 776,000         | 42"               | 3-4"          |
| 30-11      | 3600         | 5850         | 11.25                 | 180                                | 900                 | 873,000         | 42"               | 3-4"          |
| 30-12      | 4000         | 6500         | 12.50                 | 200                                | 1000                | 970,000         | 42"               | 3-4"          |
| 40-8       | 4200         | 6720         | 10.00                 | 160                                | 1050                | 1,018,500       | 46"               | 2-5"          |
| 40-9       | 4900         | 7840         | 11.66                 | 185                                | 1225                | 1,188,250       | 46"               | 2-5"          |
| 40-10      | 5600         | 8960         | 13.33                 | 210                                | 1400                | 1,358,000       | 46"               | 2-5"          |
| 40-11      | 6300         | 10080        | 15.00                 | 235                                | 1575                | 1,527,750       | 46"               | 2-5"          |
| 40-12      | 7000         | 11200        | 16.66                 | 260                                | 1750                | 1,697,500       | 46"               | 3-5"          |
| 40-13      | 7700         | 12320        | 18.33                 | 285                                | 1925                | 1,867,250       | 46"               | 3-5"          |
| 40-14      | 8400         | 13440        | 20.00                 | 310                                | 2100                | 2,037,000       | 46"               | 3-5"          |
| 40-15      | 9100         | 14560        | 21.66                 | 335                                | 2275                | 2,206,750       | 46"               | 3-5"          |
| 40-16      | 9800         | 15680        | 23.33                 | 360                                | 2450                | 2,376,500       | 46"               | 3-5"          |
| 40-17      | 10500        | 16800        | 25.00                 | 385                                | 2625                | 2,546,250       | 46"               | 4-5"          |
| 40-18      | 11200        | 17920        | 26.66                 | 410                                | 2800                | 2,716,000       | 46"               | 4-5"          |
| 40-19      | 11900        | 19040        | 28.33                 | 435                                | 2975                | 2,885,750       | 46"               | 4-5"          |
| 40-20      | 12600        | 20160        | 30.00                 | 460                                | 3150                | 3,055,500       | 46"               | 4-5"          |
| 40-21      | 13300        | 21280        | 31.66                 | 485                                | 3325                | 3,225,250       | 46"               | 4-5"          |
| 40-22      | 14000        | 22400        | 33.33                 | 510                                | 3500                | 3,395,000       | 46"               | 4-5"          |
| 40-23      | 700          | 1120         | 1.67                  | 25                                 | 175                 | 169,750         | 46"               | 6-5"          |
| 40-32      | 21000        | 33600        | 50.00                 | 760                                | 5250                | 5,092,500       | 46"               | 6-5"          |

\*Add per Section.

# Johnston Brothers, Inc.

Ferrysburg, Michigan

Established 1864

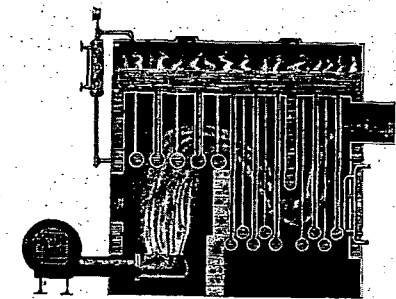
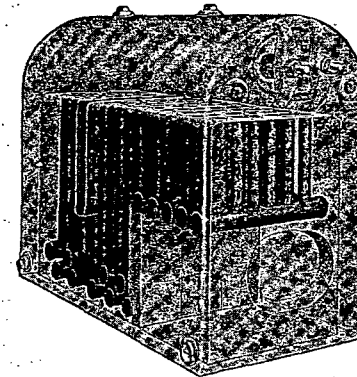
STEAM AND HOT WATER HEATING BOILERS

OIL BURNER TYPE

DESIGNED TO USE ANY OF THE TYPES OF DOMESTIC OIL BURNERS AND DELIVER AUTOMATIC HEAT ON EFFICIENT BASIS

ELECTRIC WELDED STEEL

In conformance to specifications given in the A. S. M. E. code.



| Catalogue Number.....             | OB1    | OB2    | OB3    |
|-----------------------------------|--------|--------|--------|
| Net Steam Rating.....             | 1000   | 1500   | 2000   |
| Net Water Rating.....             | 1600   | 2500   | 3400   |
| Heating Surface, Sq. Ft.....      | 125    | 163    | 218    |
| Width Overall.....                | 24 3/8 | 26 3/8 | 32 1/4 |
| Length Overall.....               | 56 1/4 | 61 1/2 | 64 1/4 |
| Height Overall.....               | 66     | 66     | 68     |
| Height of Water Line, Inches..... | 59 1/2 | 59 1/2 | 61 1/2 |