

THE APPLICATION OF REFRACTORIES

To

KEWANEE HIGHEST TEST BOILERS

FIRE BRICK SERVICE & SUPPLY CO.
900 EAST 72nd STREET
L. ENDICOTT 2478 CLEVELAND 3

As RECOMMENDED By
A. P. GREEN FIRE BRICK CO.
MEXICO, MISSOURI, U. S. A.

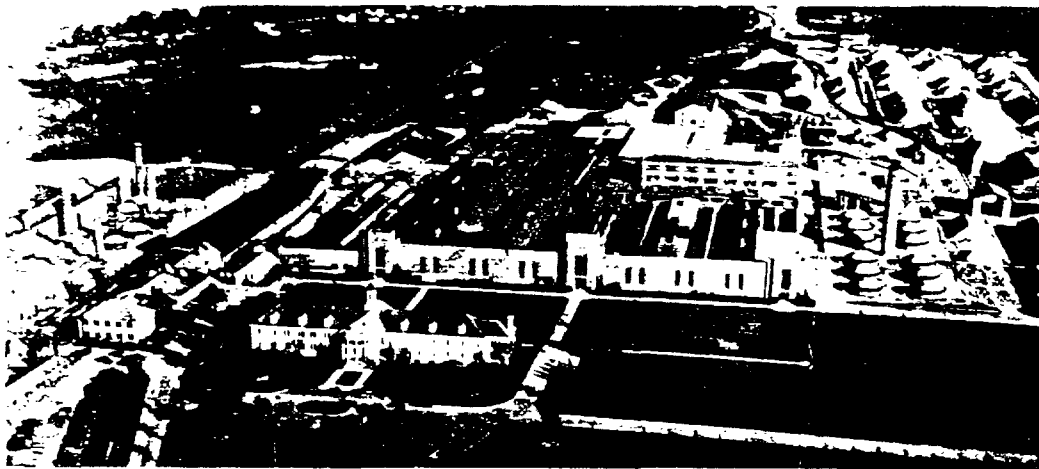
A. P. GREEN'S REFRACTORIES FOR KEWANEE HI-TEST SERIES HT

Two-Pass Portable Tubular Boiler for High Pressure Steam

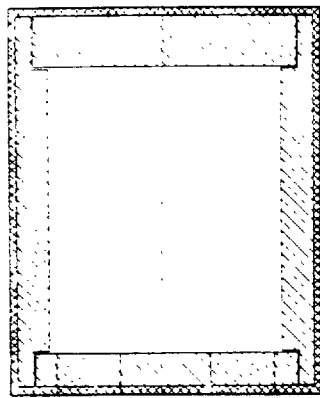
The Engineering and Research Departments of the A. P. Green Fire Brick Company have specialized in the subject of refractory requirements for steam generating units of all sizes and with varying types of firing equipment. To further low-cost operations and to affect additional savings through longer life of the furnace refractories, the Green Company recommends the refractory products specified in the drawings on the following pages. Only the finest quality Missouri fire clays are recommended for the Kewanee HT Series. Every product specified has been proven by many years of actual service.

The A. P. Green Company believes that there is sure to be one type and form of refractory that will serve each particular condition more efficiently and economically than any other and for that reason have developed a complete line of products. Because of this extensive line of materials, impartial recommendations can be made.

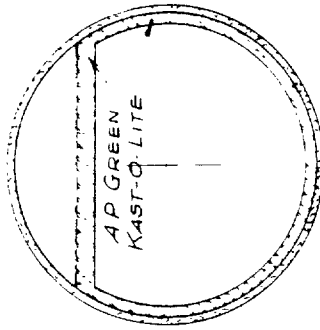
Representatives of the A. P. Green distributing organization (see inside back cover) will be glad to furnish complete, on-the-job information concerning your particular unit. These distributors maintain complete stocks of refractory products including plastic firebrick, high temperature mortars, refractory and insulating castables, maintenance coatings and industrial insulations. Prompt delivery can be made from these warehouse stocks right to the job.



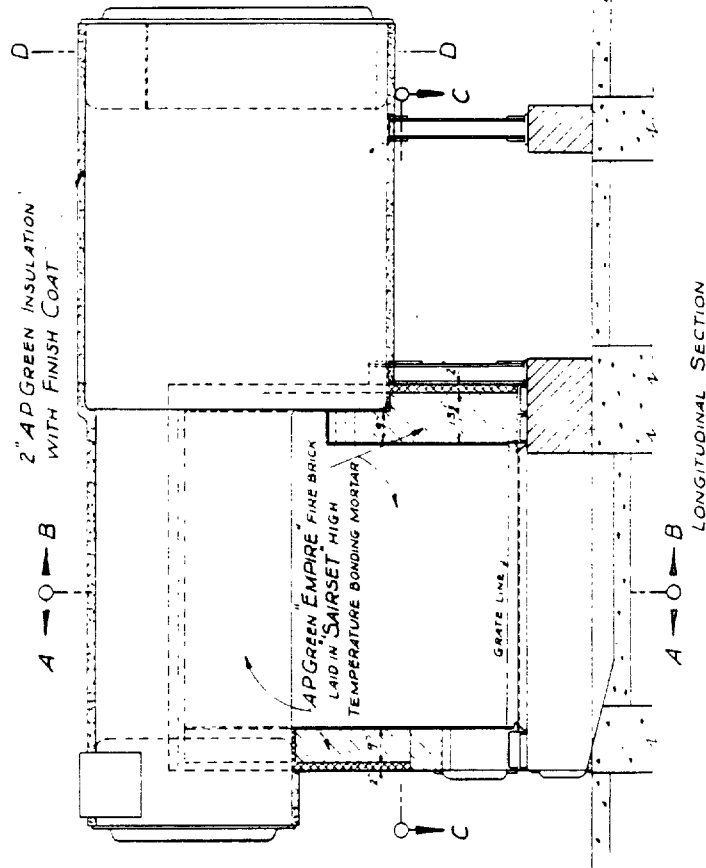
THE A. P. GREEN FIRE BRICK COMPANY PLANT at Mexico, Missouri,
is now the largest refractory producing unit in the world. In this plant is manufactured a complete line of refractory products made from the highest quality Missouri fire clay.



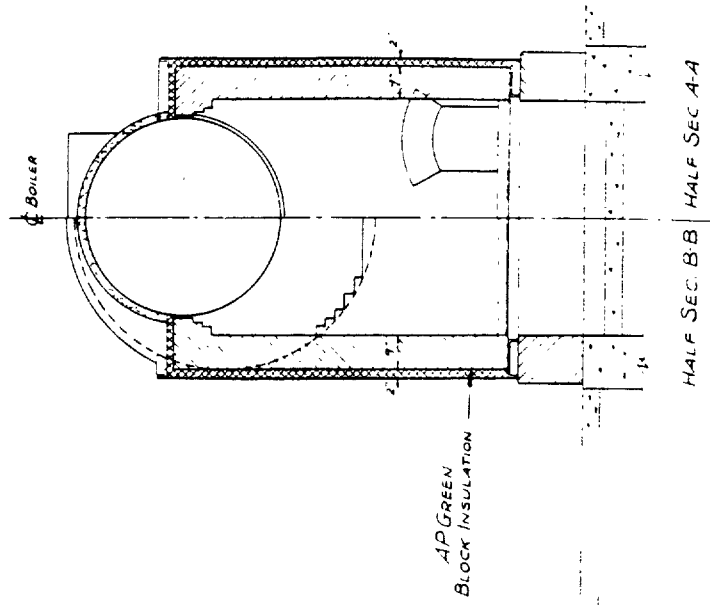
SECTION C-C



SECTION D-D



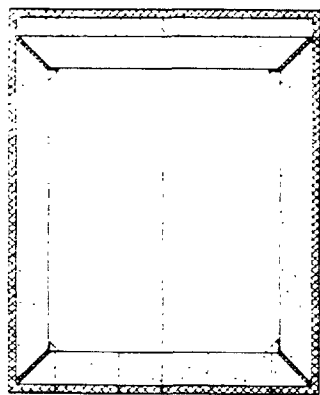
LONGITUDINAL SECTION



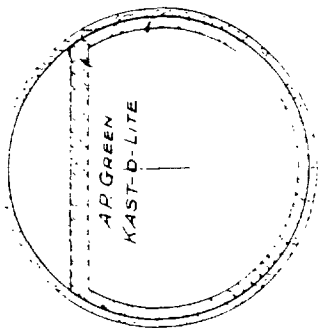
HALF SEC. B-B

HALF SEC. A-A

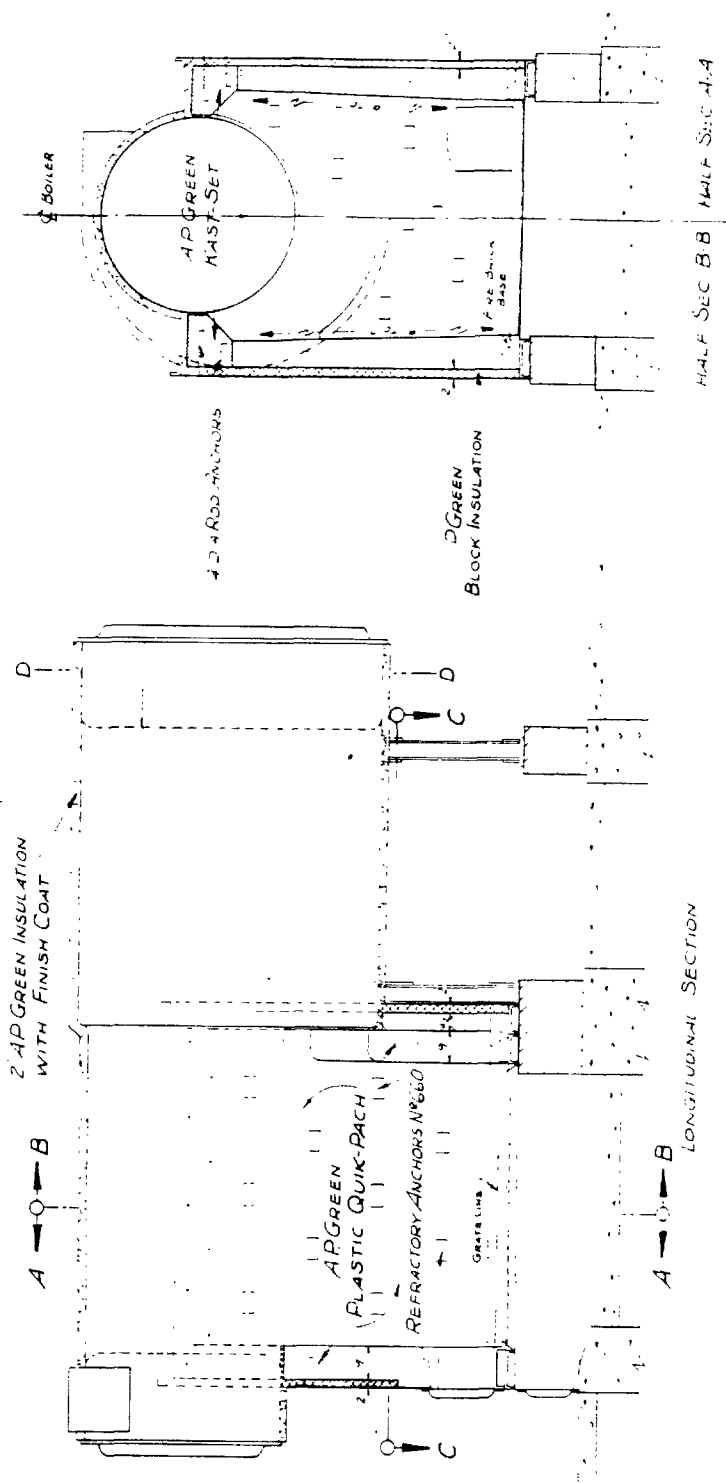
HAND FIRED INSTALLATION—BRICK SETTING



SECTION C-C

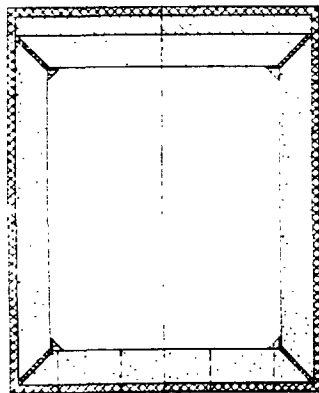


SECTION D-D

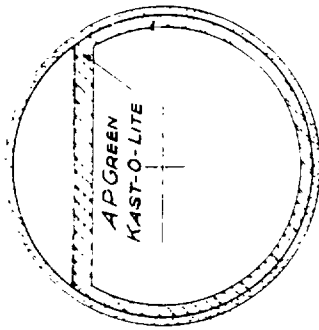


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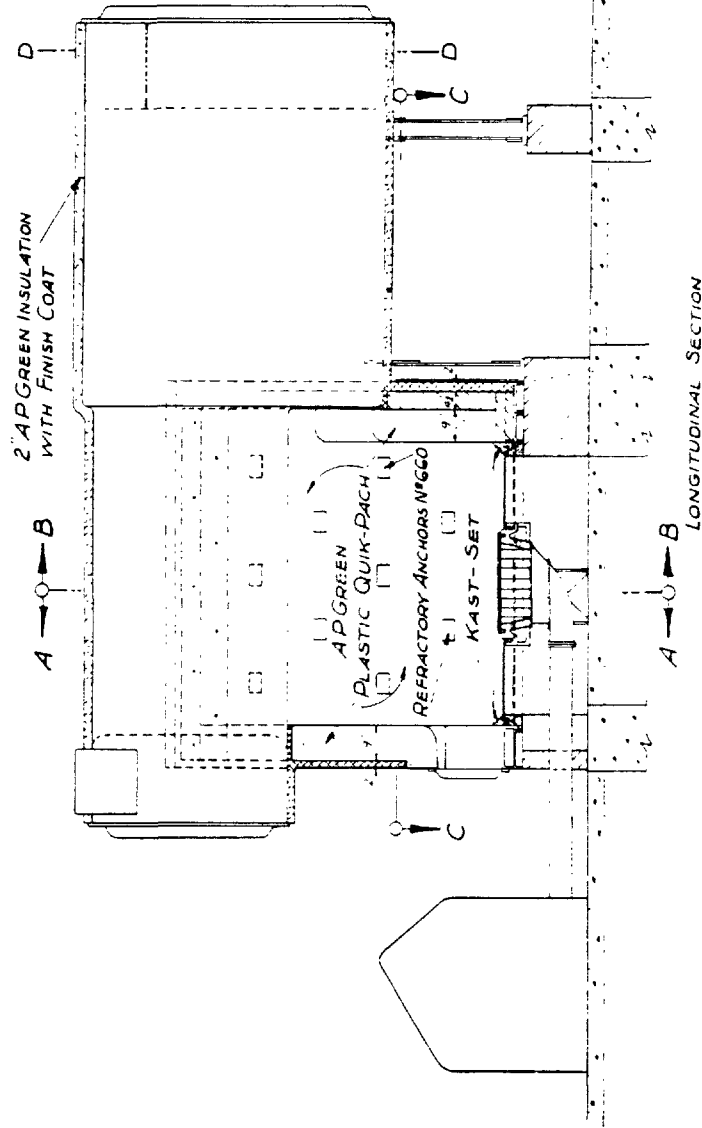
HAND FIRED INSTALLATION—PLASTIC SETTING



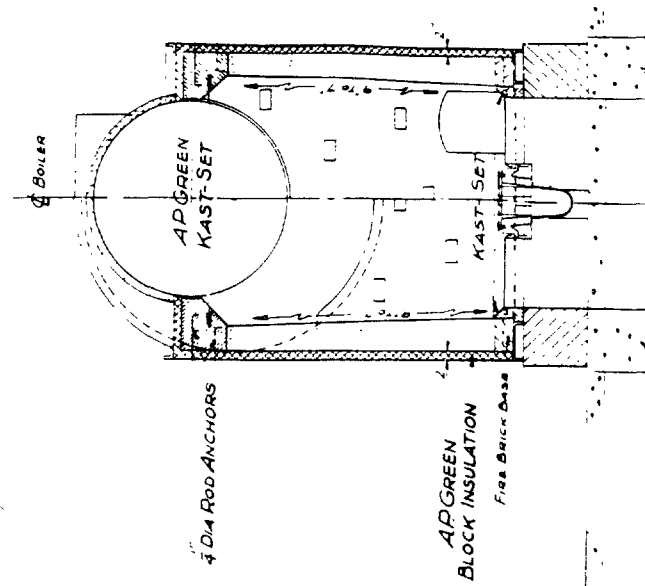
SECTION C-C



SECTION D-D

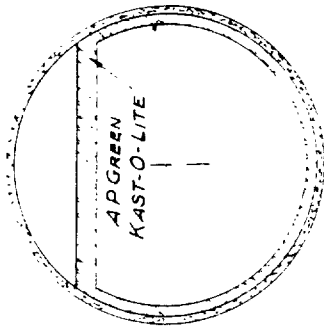
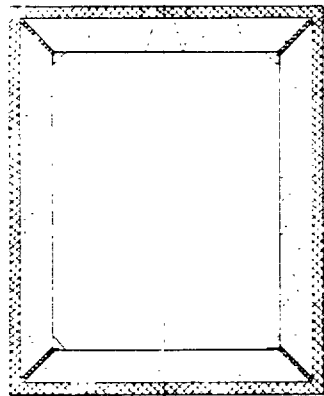


LONGITUDINAL SECTION



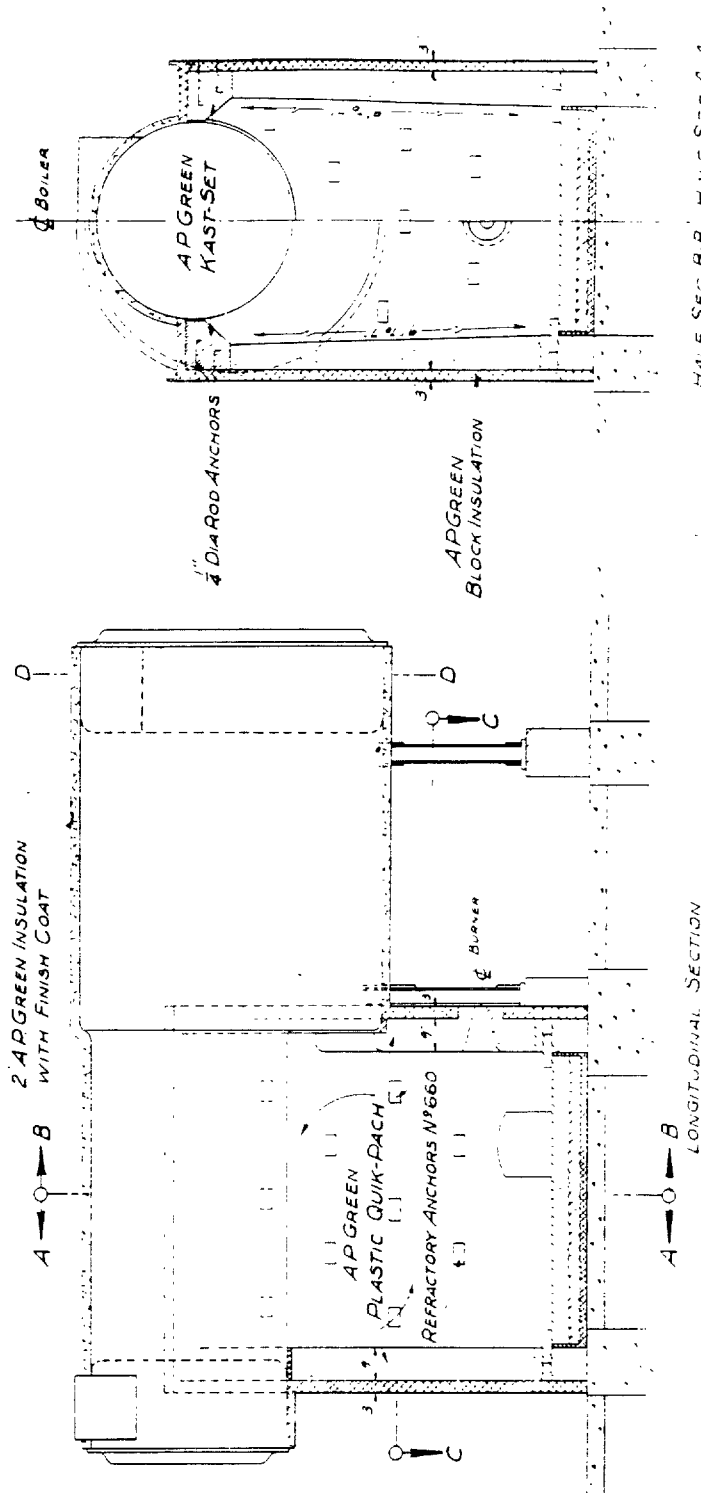
HALF SEC B-B

STOKER FIRED INSTALLATION—PLASTIC SETTING



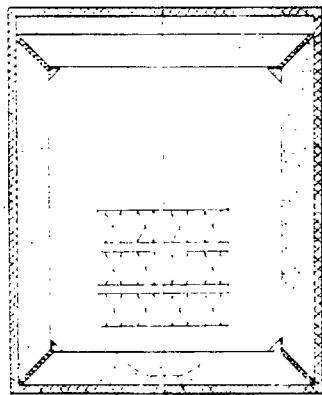
SECTION C-C

SECTION D-D

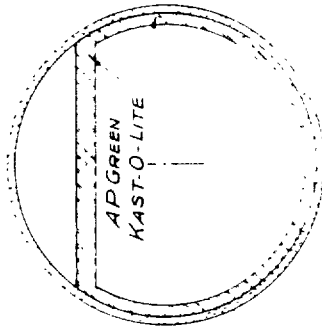


HALF SEC B-B HALF SEC A-A

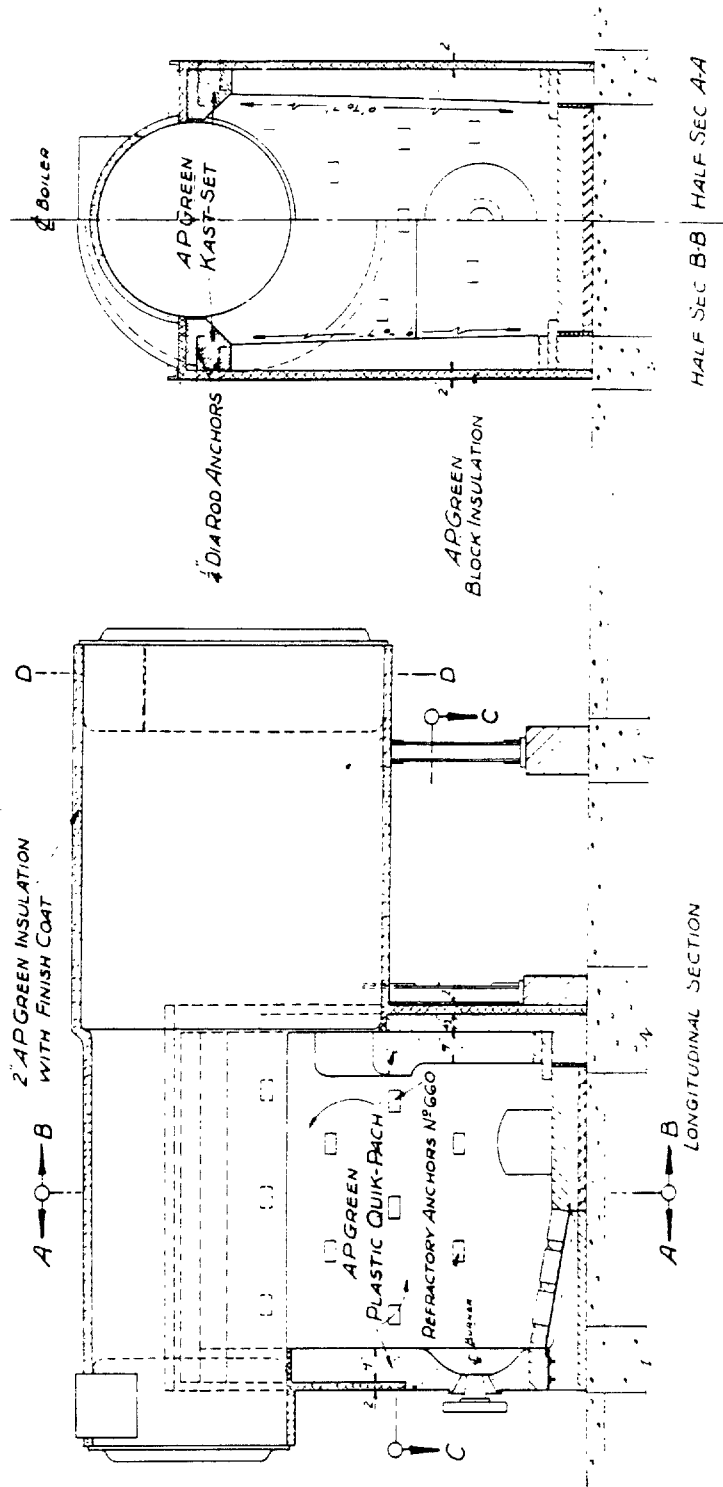
GAS FIRED INSTALLATION—PLASTIC SETTING



SECTION C-C



SECTION D-D

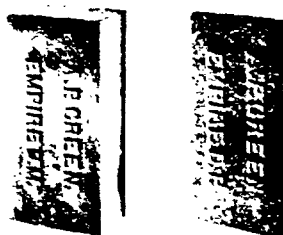


OIL FIRED INSTALLATION—PLASTIC SETTING

Refractories AND Insulations . . .

FOR KEWANEE H. T. BOILERS

"EMPIRE" HIGH HEAT DUTY



EMPIRE is a high heat duty firebrick produced entirely from one grade of scientifically selected, self-bonding Missouri fireclay. They have a high P. C. E. value due to the purity of the clays and dense texture produced by de-airing. EMPIRES are permanent in volume, have good spalling resistance and excellent load-bearing ability under severe conditions, and are exceptionally uniform due to "controlled manufacture." These characteristics combine to give long, low cost service and freedom from repairs and shutdowns. They are recommended where sudden temperature changes occur and where slag and abrasive action are present.

EMPIRE firebrick have long been the country's outstanding choice for general boiler and furnace work.



'SAIRSET

'SAIRSET is the ideal mortar for laying up firebrick. This air-setting, high temperature bonding mortar welds firebrick into a monolithic unit at all temperatures. The refractoriness of 'SAIRSET is so high that it will not soften or run out of the joint at any temperature where high heat duty, super duty or high alumina firebrick may be used. It increases the life of your refractory lining because it protects the joint and forms a bond stronger than the brick itself, thus preventing brickwork from working loose in the wall. 'SAIRSET is free from shrinkage and does not stiffen in the drum or settle out of suspension in mortar box. Packaged in ready mixed, plastic form ready for immediate use.

Available in 500-, 200-, and 100-lb. metal drums and 50- and 15-lb. metal pails.



KAST-SET

KAST-SET is an easy-to-use refractory concrete which, when mixed with water, takes on a hydraulic bond within six hours without the application of heat. First, mix with water; then, pour immediately. Saves time and labor. Not affected by steam or moisture; stops all leaks, and offers exceptional resistance to abrasion. Shows no shrinkage or ill effects from temperatures up to 2750° F.

Special shapes can be easily and quickly made with KAST-SET and at a great saving. No long delays waiting for special production. No costly cutting and fitting of firebrick. Available in 100-pound waterproofed bags.



PLASTIC Quik-Pach

A. P. Green Plastics are used for complete monolithic linings and walls in many different types of boilers and industrial furnaces, and they are particularly applicable to KEWANEE Hi-Test boiler settings.

To meet EVERY need for plastic refractories, A. P. Green manufactures TWO grades of plastics.

PLASTIC Quik-Pach is first quality plastic firebrick made of the best new, unused Missouri fire clays. None but virgin, specially calcined, clay goes into the manufacture of PLASTIC Quik-Pach or SUPER-PLASTIC.

PLASTIC Quik-Pach will actually resist spalling better than most high heat duty firebrick. It is unique in its lack of shrinkage and its ability to bear load under heat. For years PLASTIC Quik-Pach has been a standard of specification by large users of plastic firebrick.



SUPER-PLASTIC

SUPER-PLASTIC is manufactured from the finest Missouri flint fireclays to give exceptional service where operating conditions are too severe for first quality plastic or high heat duty firebrick.

American Society for Testing Materials tests show this outstanding plastic meets the requirements set for super duty plastic refractories in (1) Heat Resistance; (2) Permanent Volume; (3) Spalling Resistance. Easy to use. Sliced ready to pound into place. Saves time and labor.

RECOMMENDED METHODS OF ANCHORAGE

OF THE NUMEROUS TYPES OF A. P. GREEN REFRACTORY AND METAL ANCHORS, THESE PICTURED BELOW ARE PARTICULARLY RECOMMENDED FOR KEWANEE HIGH TEST BOILER SETTINGS.

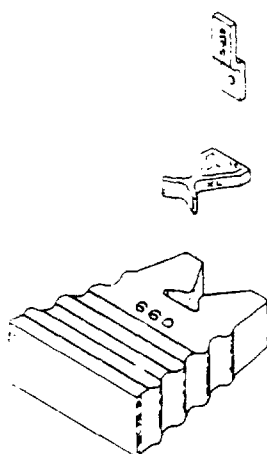


FIG. 1

Three component parts of No. 660 refractory anchor.

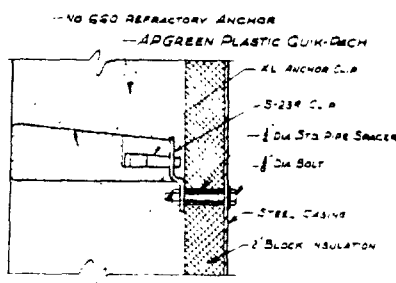


FIG. 2

No. 660 refractory anchor installed with steel casing.

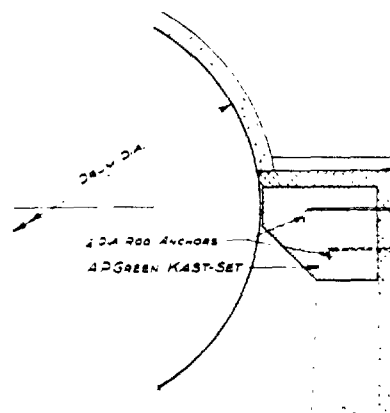


FIG. 3

Kast-Set closure at top of sidewall using 1/4" diameter rod anchors.

KAST-O-LITE

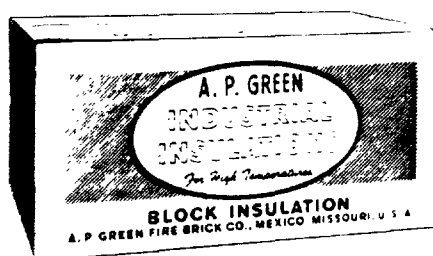


KAST-O-LITE is a castable refractory with insulating properties, for use in direct contact with flame to 2500° F. Combines insulating properties and light weight with strength in one dependable, easy-to-use castable refractory. The light weight and composition of KAST-O-LITE means that less heat is lost through the lining. Thermal conductivity as used is only approximately 30% that of heavy firebrick. Closer temperature control is possible and fuel savings result.

Not recommended where slagging or abrasive conditions are severe.

INDUSTRIAL INSULATIONS

BLOCK INSULATION



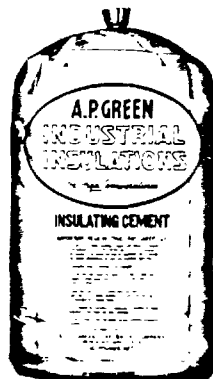
Combines light weight with physical stability. A. P. Green BLOCK INSULATION is a truly high quality insulation that remains stable under a complete range of temperatures up to 1700° F. Made from an A. P. Green slag wool base, it possesses low thermal conductivity, high refractory value with great chemical and physical stability. Though honeycombed with countless dead air cells to produce highest efficiency, it is structurally strong and has high compressive strength to withstand normal handling and usage. Tests and service prove the outstanding effectiveness of A. P. Green BLOCK INSULATION. Comes in 6" x 18" size, 1", 1½", 2", 2½", 3", 3½" and 4" thick.

CASTABLE BLOCK MIX



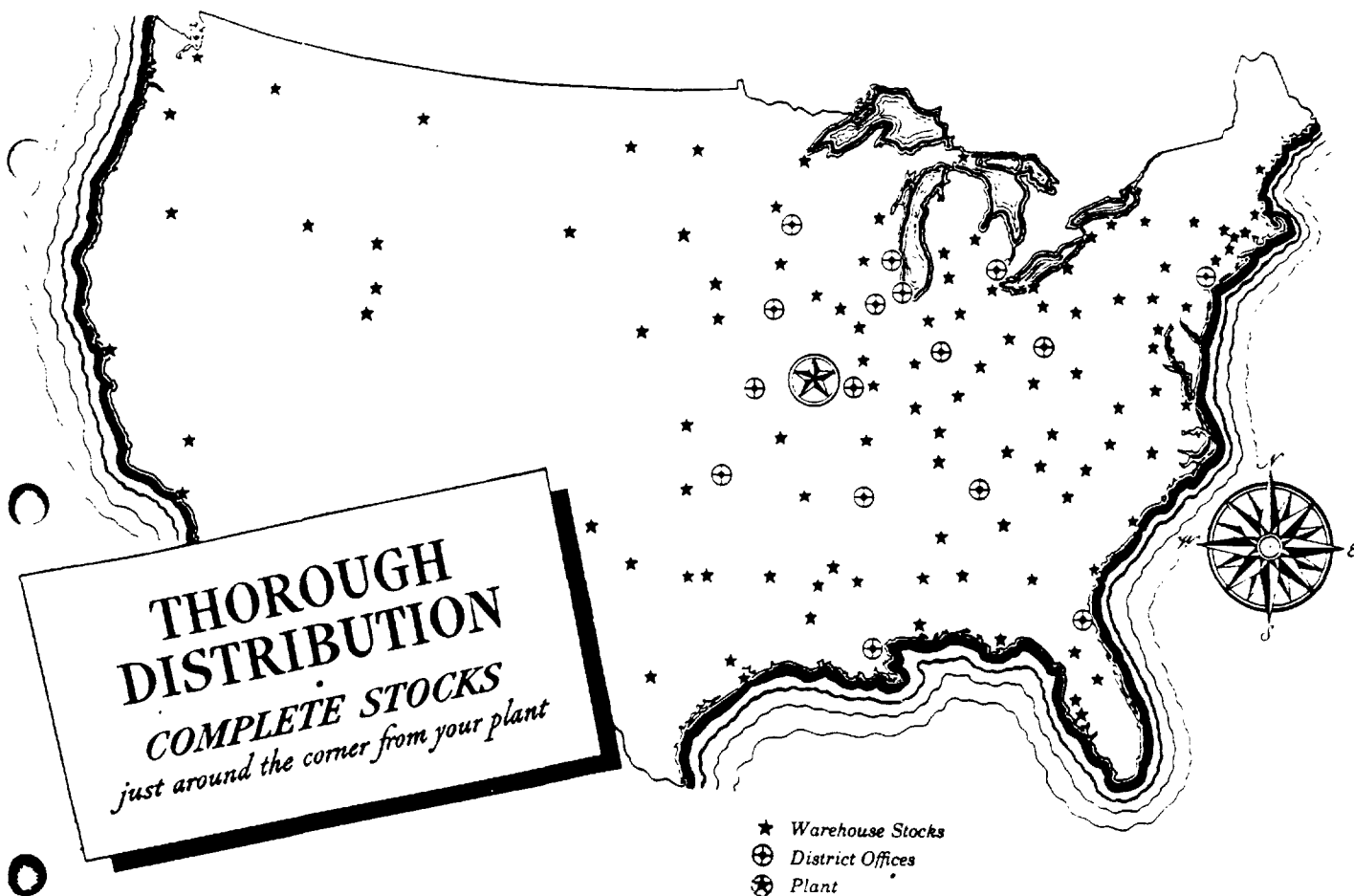
A light weight insulation for mixing and pouring. A. P. Green CASTABLE BLOCK MIX is an extremely light weight castable insulation which, when poured into place and matured, possesses approximately the same thermal conductivity and strength as block insulation. By combining the advantages of a castable material with low conductivity and light weight, CASTABLE BLOCK MIX provides maximum insulating efficiency, adaptability and ease of installation. Its exceptional light weight adds low initial cost. Weight per cubic foot in place is only 22 pounds. (For temperatures exceeding 1600° F. use CASTABLE INSULATION No. 20.) Comes in 50-pound waterproof bags.

INSULATING CEMENT



An all-purpose, non-corrosive insulating cement. A. P. Green INSULATING CEMENT has become the universal type of insulation. It can be used on almost any form of heating equipment—large or small, round, flat, or irregular—operating up to 1800° F. Size or shape makes no difference when A. P. Green INSULATING CEMENT is used. Comes dry for easy mixing as required and forms a monolithic insulation.

A. P. Green INSULATING CEMENT provides major heat economies, plus convenience of application. May be had in either 25- or 50-pound bags.



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Look in the classified section of your local telephone directory for the name, address and telephone number of your A. P. Green representative. He carries a stock of A. P. Green Products and can show you more about the advantages of the A. P. Green line.

A. P. GREEN FIRE BRICK CO.

Fireclay Brick . . . Super Duty Brick . . . High Alumina Brick . . . Special Refractory Tile
Insulating Firebrick . . . Plastic Firebrick . . . Mortars . . . Maintenance Coating Materials
Refractory Castables . . . Oil Burner Combustion Chambers

Plant and General Offices : Mexico, Missouri, U. S. A.

A. P. GREEN
FIRE BRICK COMPANY
MEXICO, MISSOURI

A. P. Green
**REFRACTORY
PRODUCTS**



A. P. GREEN FIRE BRICK CO.

MEXICO, MISSOURI, U. S. A.