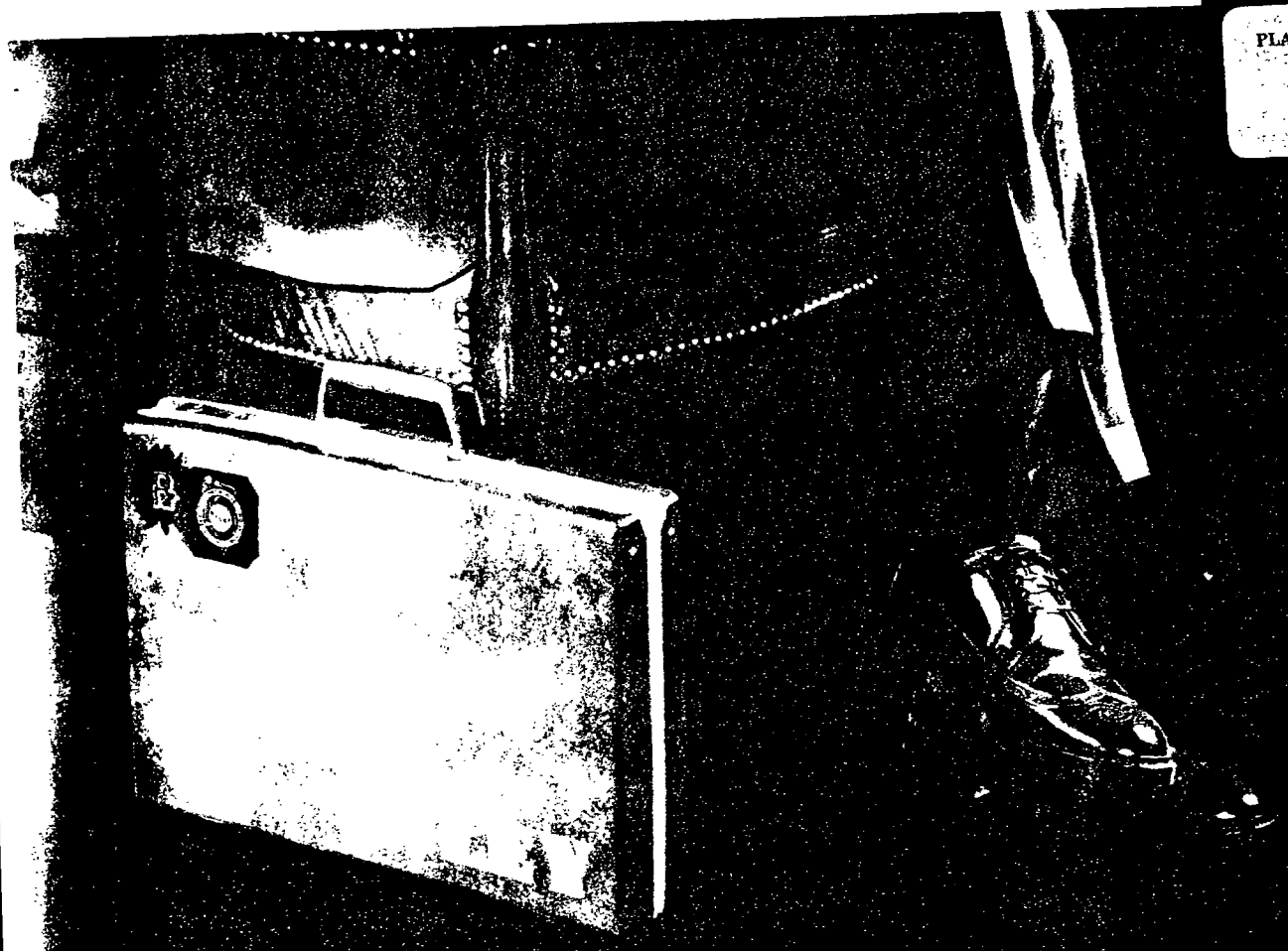
PLAINTIFF'S EXHIBIT

RS-179



Specialists in Energy Conversion

One way or another, everybody's in the energy conversion business.

But we're in it in a special way.

Making the equipment for turning "dead" fuel into "live" steam . . . dependably, efficiently . . . is our one and only business.

Riley boilers and fuel-burning equipment produce energy in the raw . . . from anything that burns.

Raw energy . . . raw power . . . live power . . . steam.

Steam — for generating electricity. Steam — for process purposes. Steam — for operating plant equipment. Steam — for space heating.

As much steam as you need — from 20,000 pounds per hour to millions of pounds per hour — for as long as you need it.

If you use steam in your business . . . you can use — and rely on — Riley products.

The following pages illustrate some of Riley's outstanding accomplishments in ENERGY CONVERSION.

Customers and consulting engineers expect versatility in boilers and fuel-burning equipment.

They get it from . . .

RILEY–specialists in energy conversion.

The customers who have purchased this energy conversion equipment approached Riley with confidence. They recognized Riley's engineering capability in designing for unusual fuels and combination firing of fuels.

A. FLUID COKE, CO GAS, OIL, REFINERY GAS — all are burned in the Riley TURBO FURNACE. Directional flame burners fire the oil, refinery gas, and fluid coke — premixing burners fire the CO gas. Fuels are burned separately or in combination. Riley Ball Tube Mills pulverize the fluid coke. Capacity: 250,000 lbs/hr., 650 psig., 510°F.

B. SUNFLOWER SEEDS, RICE HULLS, WOOD WASTE, OIL, AND GAS are all burned in this unusual boiler. A Riley Dumping-type Grate is combined with a Riley water-cooled Single-header Hopper Bottom. Capacity: 100,000 lbs/hr., 650 psig., 755°F.

C. CATALYTIC FLUE GASES AND NATURAL GAS are burned in the TURBO FURNACE of this boiler. This results in a reduction in air pollution. Capacity: 75,000 lbs/hr. Natural gas — 50,000 lbs/hr. Catalytic flue gas — 450 psig., 650°F.

D. ASH RE-INJECTION FOR MINIMUM CARBON LOSS. When ash from pulverized coal is re-injected into the TURBO FURNACE, carbon in the ash is reduced to a minimum, resulting in increased combustion efficiency. TURBO FURNACE BOILERS are quick to respond to load changes. Slag is tapped continuously. Capacity: 175,000 lbs/hr., 900 psig., 835°F.

E. BLAST FURNACE GAS produces 350,000 lbs. of steam per hour in this TURBO FURNACE BOILER. Special directional-flame burners were designed for the huge volume of gas required. 975 psig., 850°F.

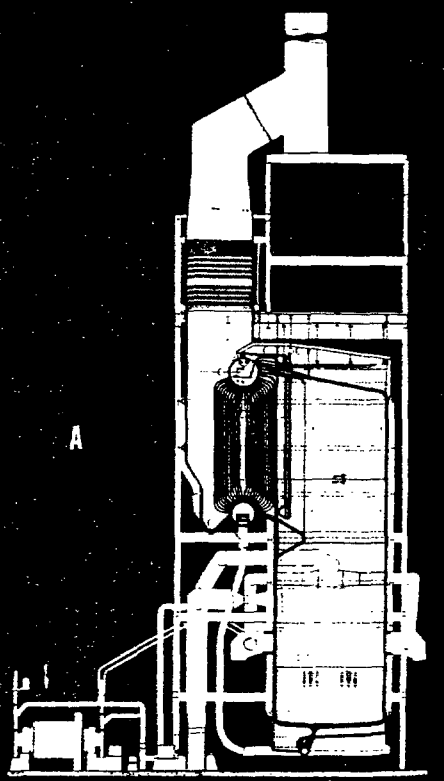
F. UNHOGGED BARK AND COAL. These two fuels are fired singly or together in variable proportions, under complete automatic control. Elimination of hogging and storage has resulted in attractive savings. Capacity: 250,000 lbs/hr., 500 psig., 750°F.

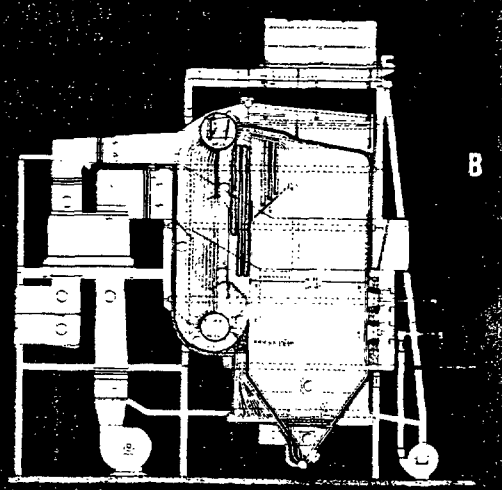
G. COKING STOKER FIRED BOILER. Produces better than 70 tons of coke per day and up to 90,000 pounds of steam per hour. 300 psig. Saturated.

H. COKE BREEZE, SUB-BITUMINOUS, ANTHRACITE AND LIGNITE — fuels with a wide range of coking, caking, and ash fusion characteristics are efficiently burned on Riley-Harrington Traveling Grate Stokers in boilers from 50,000 to 250,000 lbs/hr. capacities.

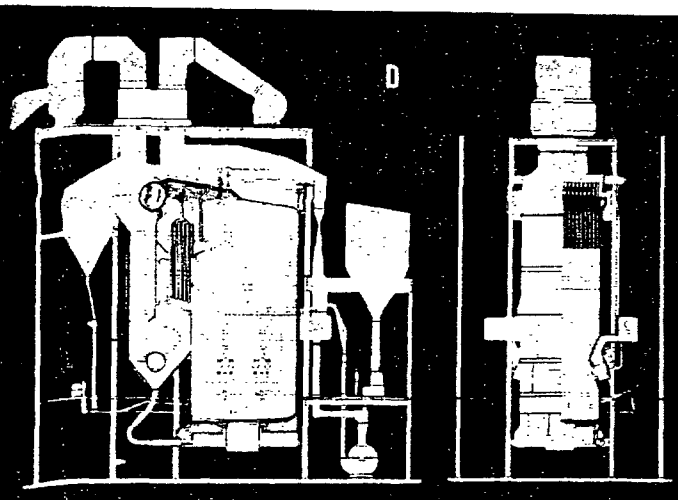
I. BARK, PULVERIZED COAL, OIL. This unusual boiler features a sloping water-cooled grate combined with a water-cooled ash hopper. Bark is fired by pneumatic distributors; pulverized coal and oil by Riley Flare Type Burners. Capacity: 200,000 lbs/hr., 850 psig., 850°F.

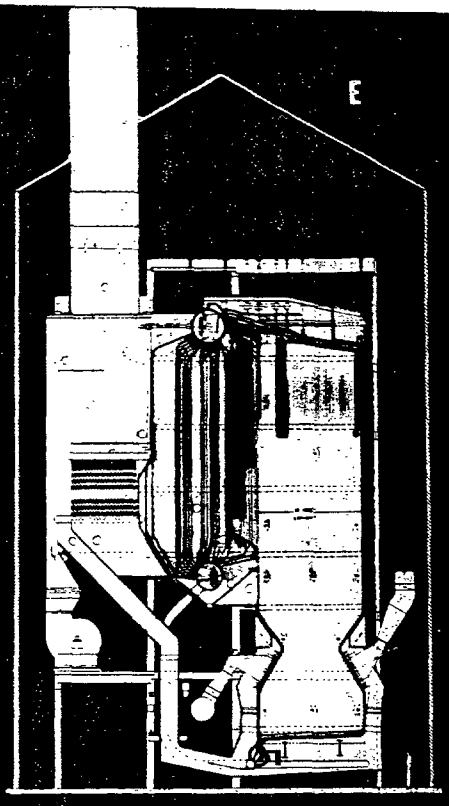
J. BAGASSE, OIL, GAS are fired in this VO Type RILEY-UNION Boiler. Bagasse is handled by a system of conditioners and peneumatic distributors — the first choice of the sugar industry for producing steam for both process purposes and power.

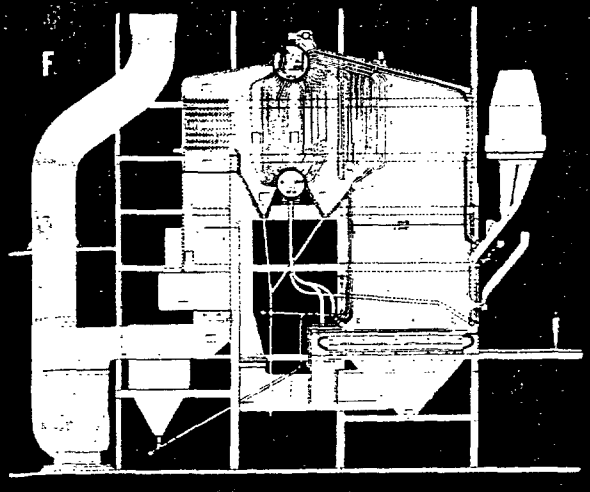




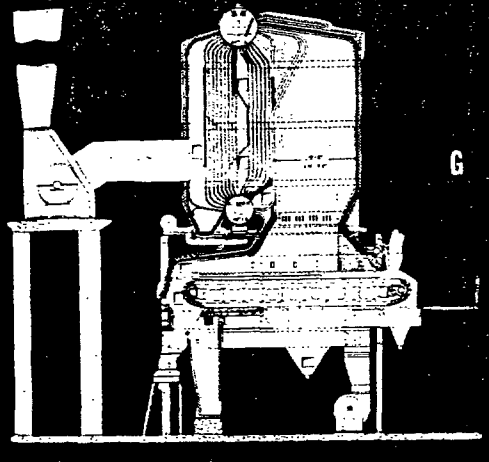


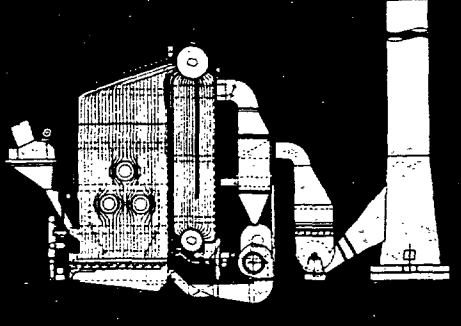


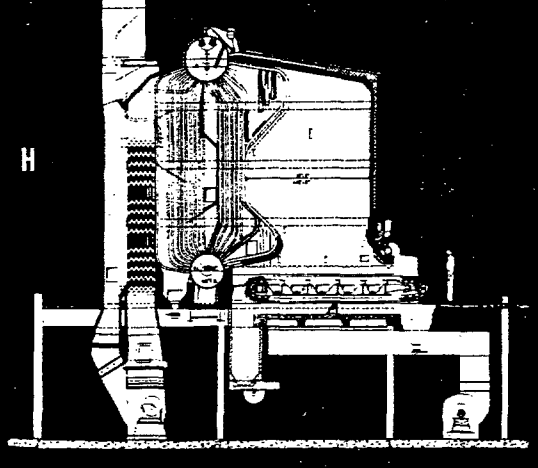












STEAM GENERATORS, PACKAGED BOILERS AND
ALL TYPES OF FUEL-BURNING EQUIPMENT