

- (1) Number of pages 8
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TAMIL NADU ARCHIVES

GOVERNMENT OF TAMIL NADU

Public DEPARTMENT

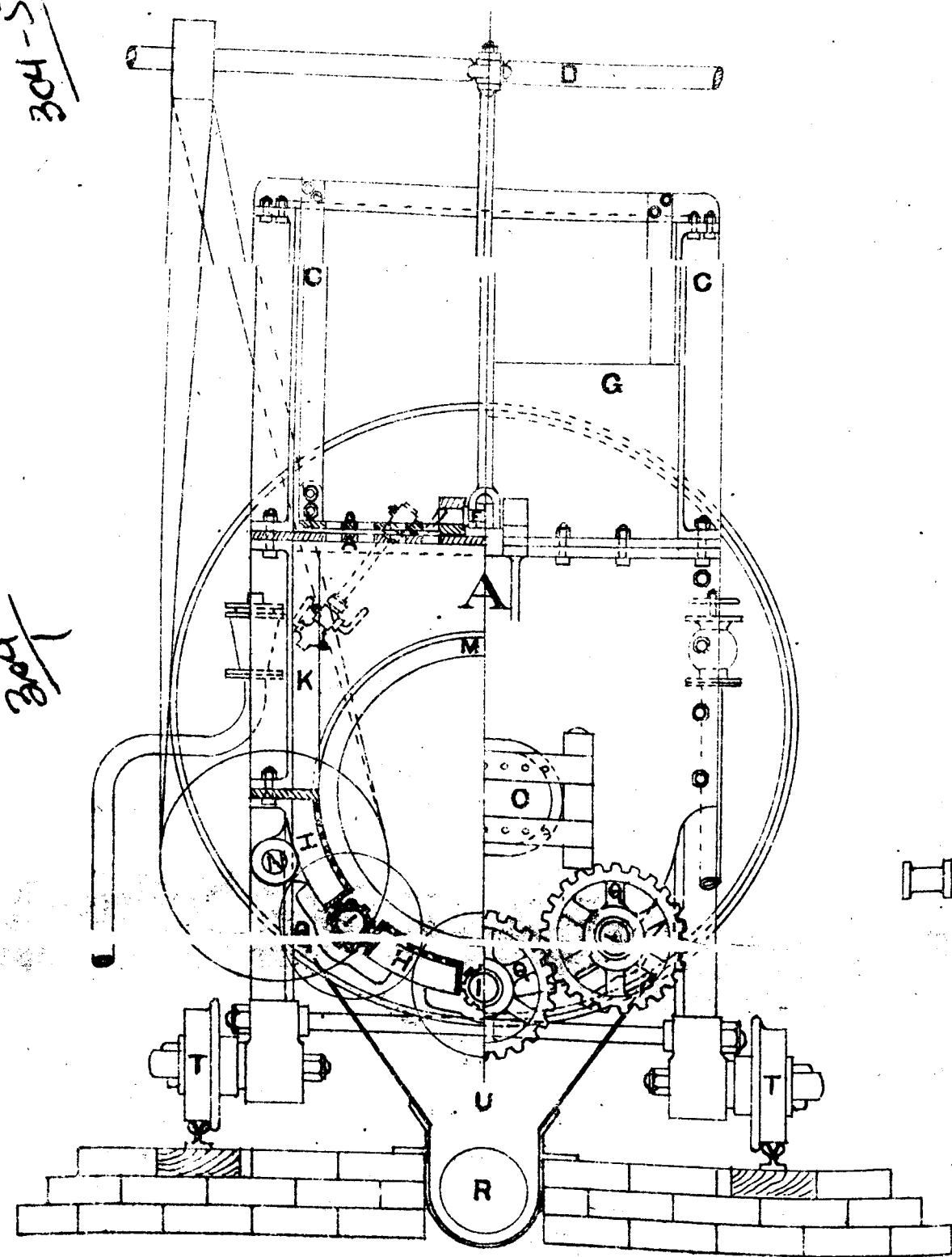
G.O. No.	~~304-305~~ 162	Press.
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Dated	30.3-1981	197

Not to be folded or roughly handled

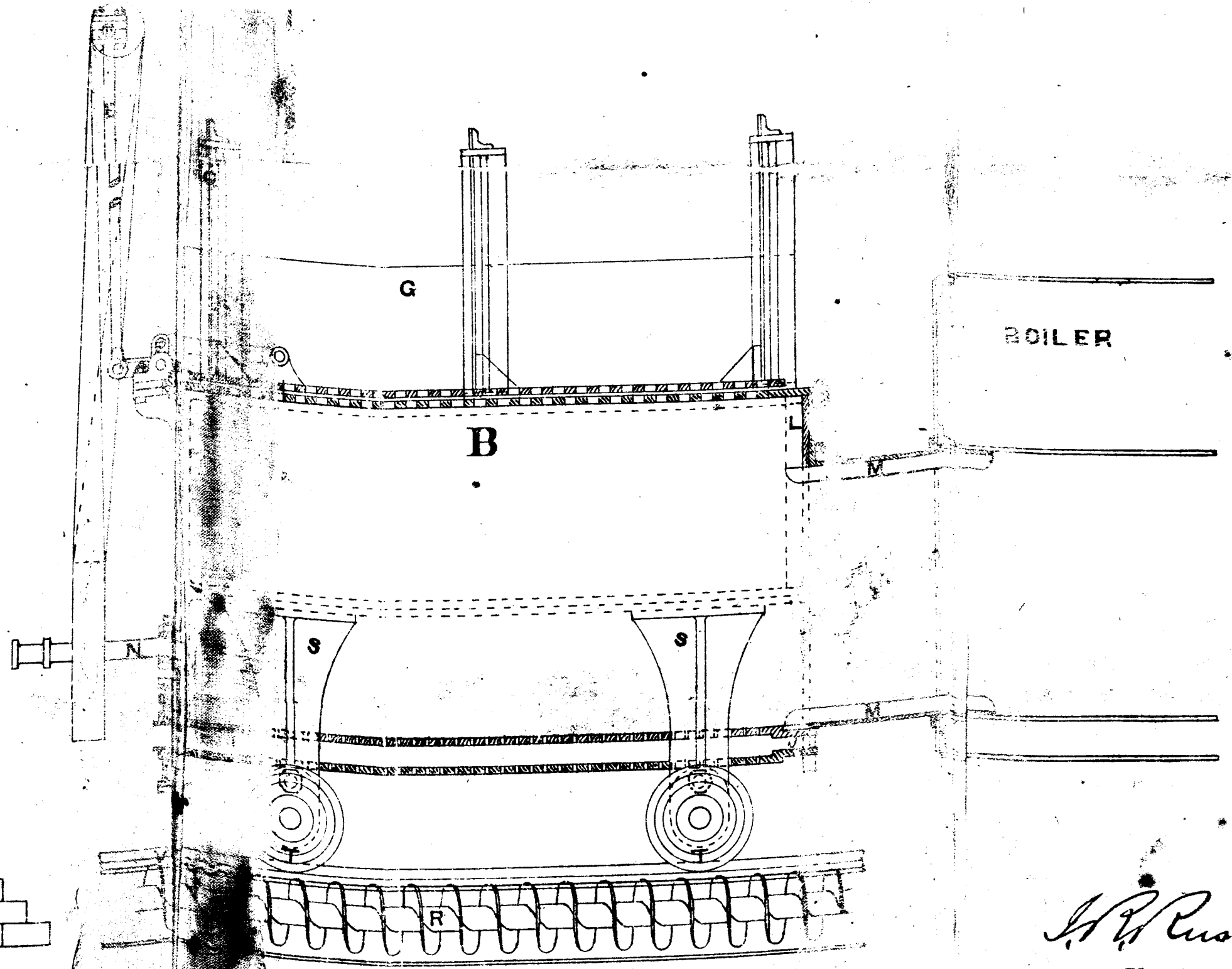
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Scale $\frac{3}{4}$ "=1 foot



J. H. Russell
Engineer
Rangoon

SPECIFICATION

BY G. L. 45
Of a Furnace for Steam Boilers or other work or purposes to be fired with paddy husk saw dust or small coal filed under the provisions of act XX of 1859 previous permission having been obtained in that behalf from His Excellency the Governor General of India.

This invention possesses the following advantages, viz:

1st A complete method of stoking is done by machinery which spreads the fuel equally over the firegrate and ensures a steady supply of steam.

2nd It takes up a little space and can be applied to any form of boiler. It can also be made quite portable and being placed on rails and wheels it can be easily detached from the boiler to which it may have been applied and removed without breaking it down.

3rd The furnace is supplied or fed with fuel by means of a fixed slotted plate which forms the top of the furnace over which is suspended by means of springs rods or rollers (whichever may be found most convenient) another plate similar to it to which motion is given by cranks eccentrics or cams so that when the slots in both plates come over one another a portion of the fuel from the hopper above is let down into the furnace the quantity of which is regulated by the increase or decrease (as the case may be) of the stroke or travel of the top plate which enlarges or lessens the openings or slots through which the fuel passes into the fire place in the furnace. Another means of feeding this furnace with fuel can be managed by having flat or fluted rollers laid either longitudinally or transversely so as to form the top of the furnace and be driven by a belt or wheel sufficient to secure

4th The fire grate surface is made concave having rows of perforated plates or bars with rollers intervening. These rollers as shown in the plan are made hollow and are perforated for the purpose of allowing a current of air to pass through them or to admit of a blast of air as desired to keep them clear and secure increased circulation. These rollers also remove the ashes or refuse as the fuel is burnt in the grate by discharging it into a hopper in which a worm or screw is placed for the purpose of removing the ashes or refuse to any convenient distance from the furnace.

The mode of working this furnace and the explanation of the annexed drawing or plan are as follows viz.

A is a half end section and half end elevation of the furnace B is a longitudinal section of the furnace. On the end plate at D which is the door for stoking in the usual way a fire is lighted for the purpose of igniting the fuel

*Public 1881 Deptt.
Specimens*
MAR 21

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RECEIVED in the Office of the Secretary to the Government of India in the Home, Revenue and Agricultural Department on the 14th Feb^y 1881.

F. Danks

10.2.81

Under Secretary to the Govt. of India.

Recd 19th March 81.

No: 53

No. 411.

COPY forwarded to the Government of Fort St. George in conformity with Section 10 of Act XV. of 1859.

F. Danks

Under Secretary to the Govt. of India.

FORT WILLIAM;
HOME, REV. & AGRI. DEPT.
(PATENTS),
The 19th Feb^y 1881.

PROCEEDINGS of the MADRAS GOVERNMENT.

READ the following endorsement of the *Under Assistant* Secretary to the Government of India, Home Department.

Here enter *19 February 1881*, No. 111.

ORDER THEREON, *30th March 1881 No. 462*

THE following Notification will be published in the Gazette once.

Notice is hereby given that there have been received in the Office of the Chief Secretary to Government, where ~~any of them~~ it may be inspected at all reasonable times on payment of a fee of one Rupee, ~~a copy~~ of the Specification of the invention of which the following ~~is a~~ brief description:—

"Of a Furnace for Steam Boilers or other work or purposes to be fired with paddy husk saw dust or small coal", filed by Mr. J. R. Russell, Engineer, Rangoon

~~filed by~~
Act XV of 1859.

in accordance with Section X,

21.3.81

guc

Feb 1949 of 87

(A)

DISPOSED OF

20 MAR 81

BY G.O. N^o. 462 (Public)

No 588

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