

[54] **THERMAL POWER STATION**
 [75] **Inventor: Paul Gerard, Creteil, France**
 [73] **Assignee: Societe Generale d'Enterprises, Paris, France**
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719,545 2/1903 Williams 110/10
 3,302,621 2/1967 Klein..... 122/510
 3,384,052 5/1968 Zimmerman..... 122/510 X

Primary Examiner—Kenneth W. Sprague
Attorney—Richard C. Sughrue et al.

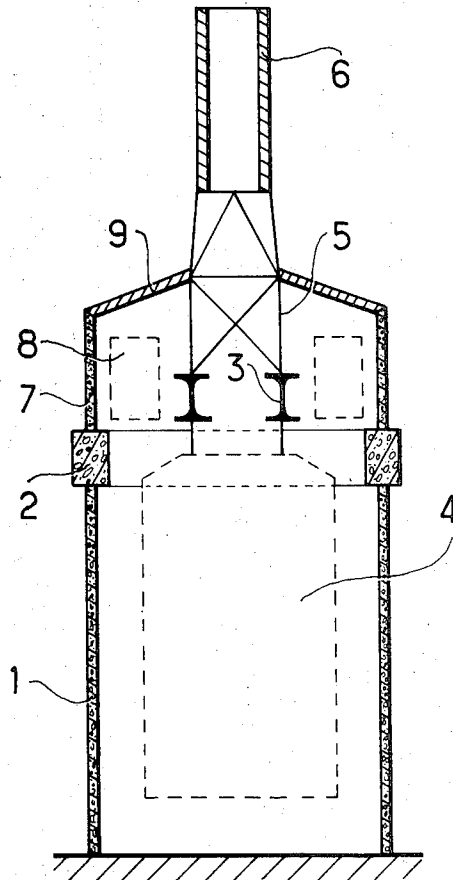
[52] **U.S. Cl.**..... 122/510, 110/184
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 [58] **Field of Search**..... 110/1 R, 10, 184;
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[57] **ABSTRACT**

A thermal power station employs a boiler room in the form of a concrete oven and a chimney, preferably metallic, placed above the boiler room.

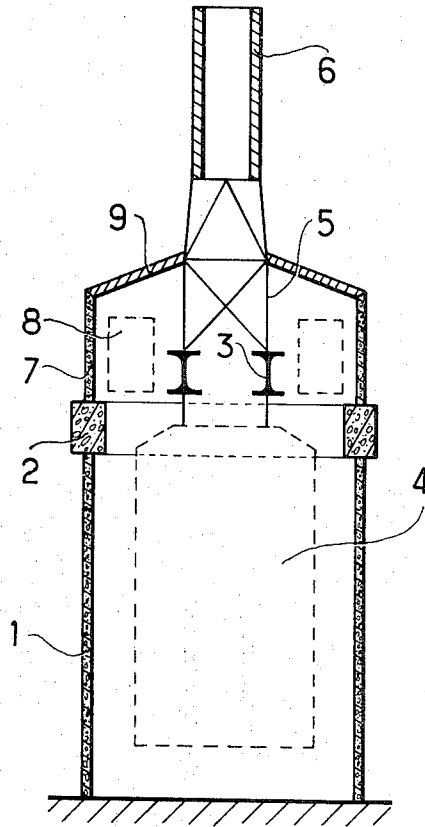
[56] **References Cited**
UNITED STATES PATENTS
 3,207,135 9/1965 Durham..... 122/510

4 Claims, 1 Drawing Figure



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3,769,943



THERMAL POWER STATION**BACKGROUND OF THE INVENTION****1. Field of the Invention**

The present invention relates to a new structure for a thermal power station.

A cylindrical tower is provided with a belt at its upper end across which extends a metal frame supported by the belt at its end which in turn supports the lower end of the chimney and from which is suspended the boiler in line with the chimney.

2. Description of the Prior Art

Thermal power stations of conventional type comprise a boiler mounted on a metal framework which can be encased and a smoke removal chimney, more often conical and arranged at a distance from the boiler. Such structures are expensive.

The applicant has described, in U.S. Pat. application Ser. No. 193,845, filed Oct. 29, 1971 entitled: "Thermal Power Plant," a structure for a thermal power station in which the framework supporting the boiler is made of concrete and in which the chimney is cylindrical, and has a vertical portion common with the framework.

An embodiment of this type, which enables a great economy in construction in relation to embodiments of conventional type, is a particular advantage in the case where the chimney is very high (height greater than 120 meters).

In the case where the smoke removal heights do not exceed 100 to 120 meters, the structure described in the aforementioned patent application can be replaced by a varied version of structure having, in certain cases, an economic interest.

SUMMARY OF THE INVENTION

The present invention therefore has for its object a thermal power station comprising a boiler supported by a framework, and a smoke removal chimney, characterized in that the said framework is a concrete tower provided with a belt having a metal frame which itself supports the said chimney.

According to a preferred embodiment, the chimney is metallic.

BRIEF DESCRIPTION OF THE DRAWING

The invention will be well-understood from the following description of an example of an embodiment

given by way of illustration but having no limiting character with reference to the accompanying drawing in which the single figure is a vertical sectional view of a thermal power station according to the invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The power station shown in the figure comprises a concrete framework 1, in the form of a cylindrical tower. That tower is, to great advantage, constructed by a method called the "sliding framework" method.

The framework 1 comprises a belt 2 which supports a metal frame 3 which acts simultaneously as a support for the boiler 4, and as a support for the frame 5, which supports the metal chimney 7.

Above the belt 2, the concrete covering of the tower is extended at 7, and acts simultaneously as a lateral projection for the metal elements 8 above the boiler, and as a support for a roof 9.

The chimney is made preferably of metal. It is directly placed above the boiler.

It must be understood that the invention is in no way limited to the embodiment described and illustrated, which has been given only by way of an example. More particularly, without going beyond the scope of the invention, certain arrangements may be changed or certain means may be replaced by equivalent means.

What is claimed is:

1. In a power station including a concrete cylindrical tower, the improvement comprising:
 - a belt formed within the upper end of said tower,
 - a metal frame spanning the top of said tower and supported at its ends by said belt,
 - a chimney supported on said metal frame and extending upwardly therefrom, and
 - a boiler supported by said metal frame and extending beneath said frame and said chimney.
2. The thermal power station according to claim 1, wherein said chimney is metallic.
3. The thermal power station according to claim 1, wherein the tower extends above the belt in the form of a concrete covering which acts as a protection member and as a roof support.
4. The thermal power station according to claim 2, wherein: the tower extends above the belt in the form of a concrete covering which acts as a protection member and as a roof support.

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