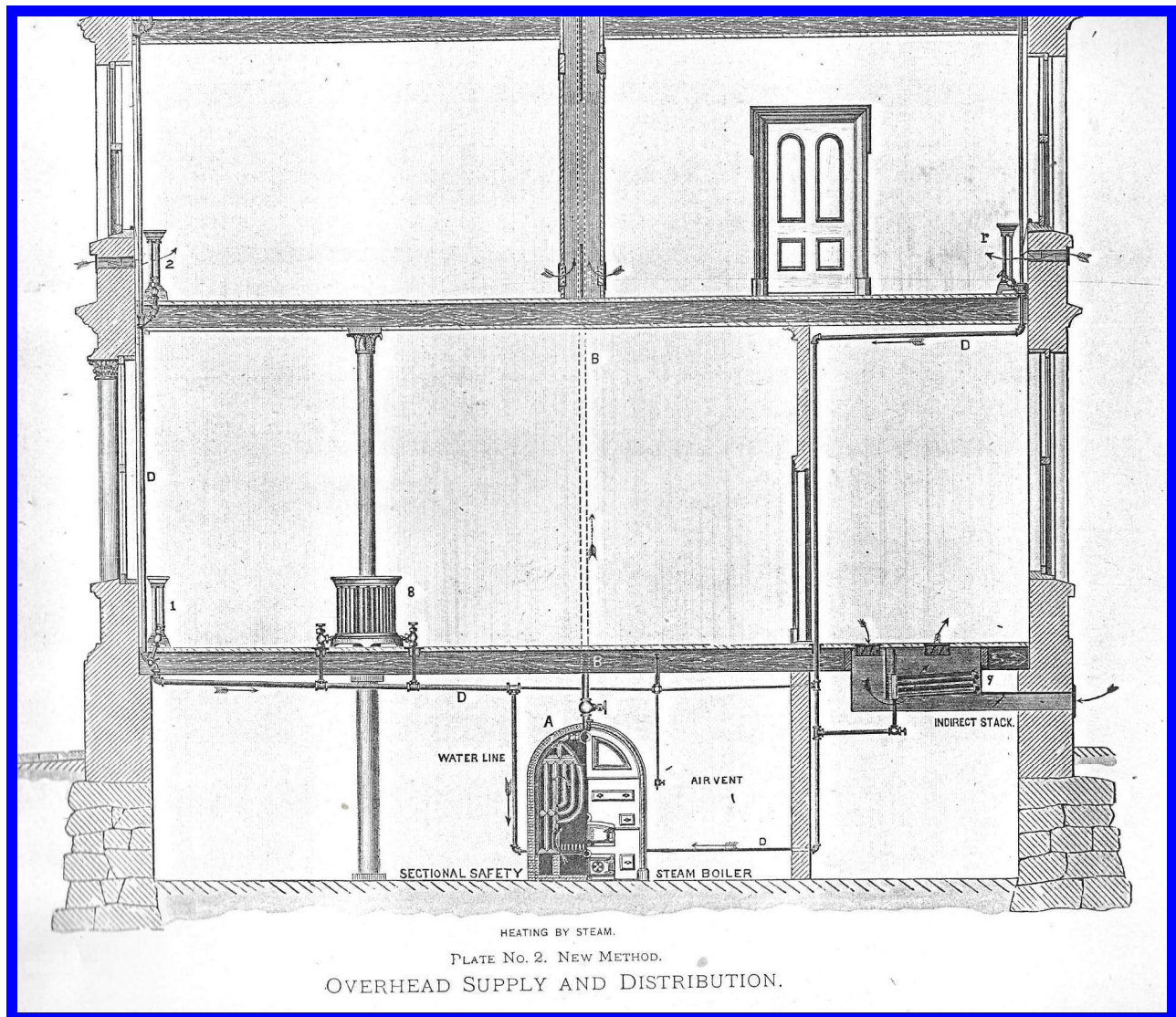


STEAM & HOT WATER BOILERS 1840-1930

Steam Boilers



ILLUSTRATIONS FROM RARE AMERICAN TEXTBOOK
HEATING BY STEAM, 1877 BY JOHN H MILLS (MILLS BOILERS)

July 28 1873

HEATING BY STEAM.

ITS BEST APPLICATION IN WARMING AND VENTILATING

Public Buildings,

FACTORIES and PRIVATE RESIDENCES,

WITH

ILLUSTRATED DESCRIPTIONS

OF

An Improved Method



of Piping,
FOR Mechanical Engineers.

BOTH DIRECT AND INDIRECT RADIATION.

WITH

SOME USEFUL TABLES.

By JOHN H. MILLS, Trustee,

"Mill's Steam Heating Trust Association,"

BOSTON, MASS.

BOSTON:

GUNN & BLISS, PRINTERS, No. 31 HAWLEY STREET,

1877.

PREFACE.

IT is not the writer's intention to attempt a "hand book" for the profession, or to enter on a discussion of the relative merits of the different methods employed for securing artificial heat and ventilation.

The superiority of steam as the best medium, being generally conceded a safe, silent and satisfactory application of it, to the varied and growing demands, remained (even after so many years use) still the desideratum.

Having devoted the time since 1867 to the study of, and application of steam for power and to heating, facts and figures are offered the reader; his object being principally to show what results may be obtained by a certain application of means and materials to the desired end.

The plans presented having been in use the last three years, in nearly all classes of buildings, render the statements and endorsements submitted, of value to the intelligent and progressive reader.

The tables embodied have been compiled from experimental data, and are introduced to make clear the inferences and results accomplished.

In the field of mechanics, the economy of material and better application of "means to ends," are fast being recognized as the true "science of progress;" and even now that machine which accomplishes a given work with the fewest parts and simplest movements, bears away the prize.

So in the application of the other sciences, that method or system which shall lead straightest to the desired end, will be sought after, approved and made the standard.

Therefore, to the owners of buildings, to Architects charged with their construction, and to the practical heating Engineers, these pages are addressed, with the hope that they may merit a considerate and candid perusal.

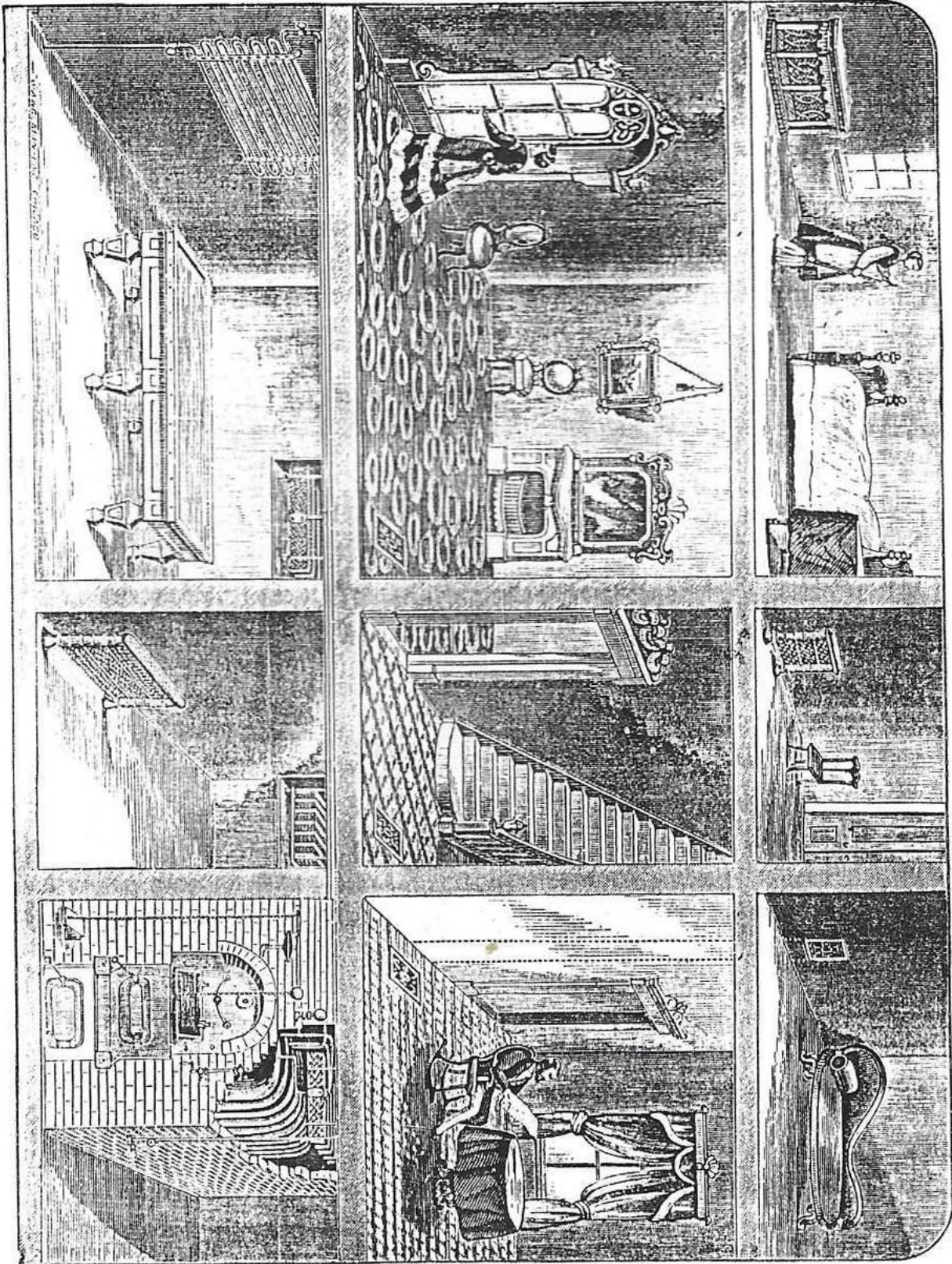
Respectfully yours,

JOHN H. MILLS.

BOSTON, January 1st, 1878.

PLATE No. 4.

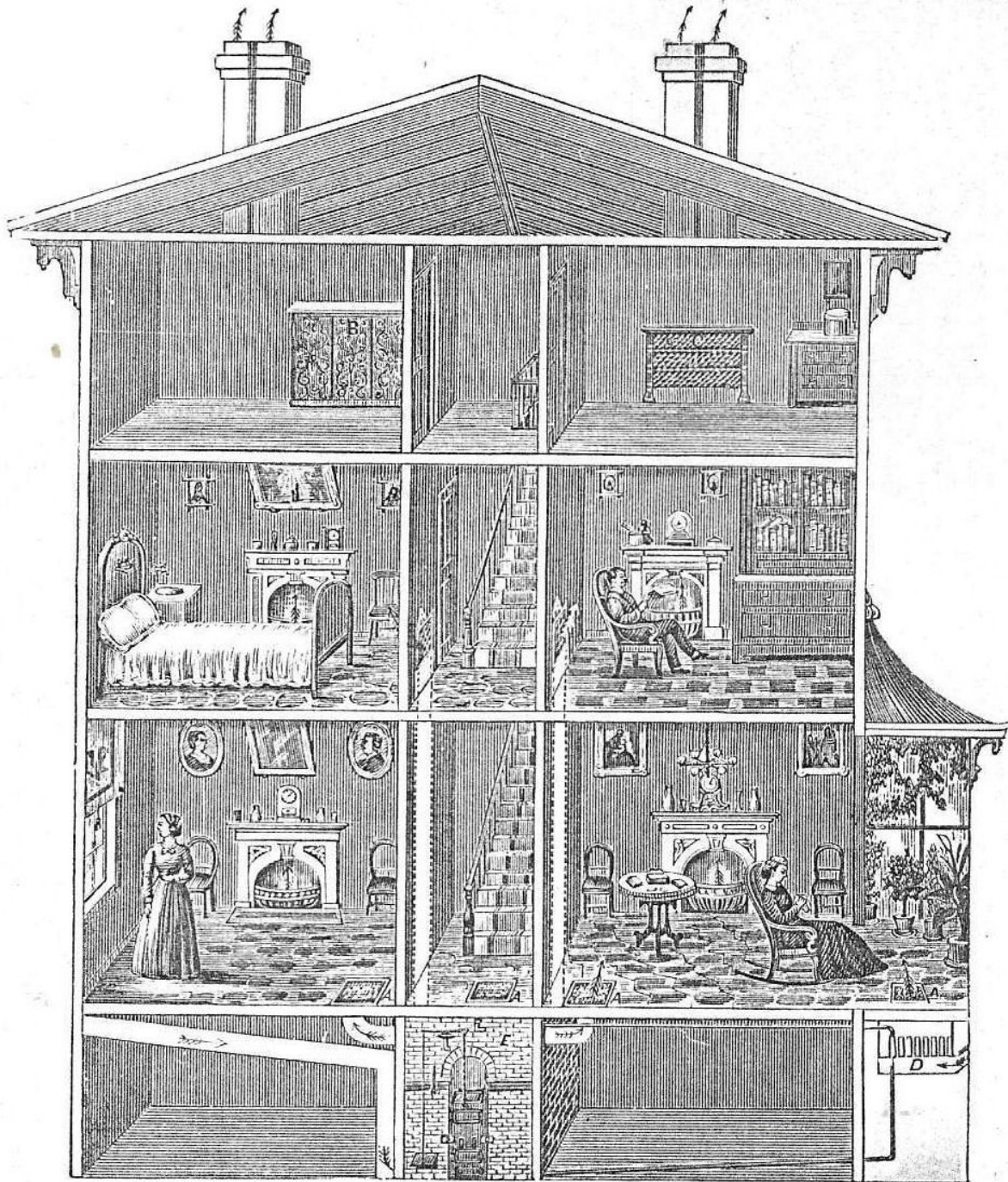
HEATING BY STEAM.



HEATING OF A PRIVATE DWELLING SHOWING GENERAL ARRANGEMENT OF BOILER, AND HEATING SURFACES

PLATE No. 5.

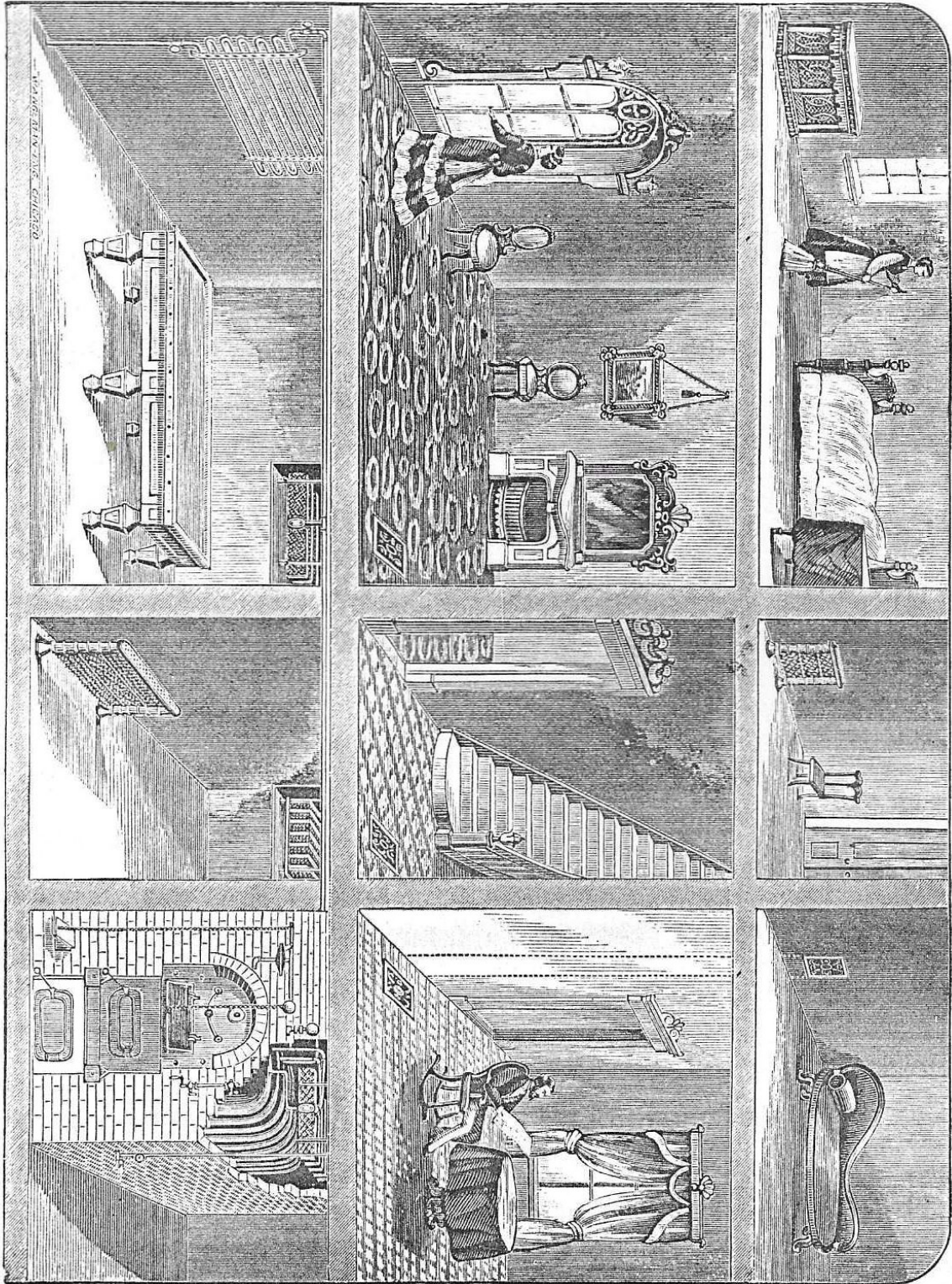
HEATING BY STEAM.



HEATING BY INDIRECT RADIATION, ALSO THE REMOVAL OF THE VITIATED AIR THROUGH THE CHIMNEYS.

PLATE No. 4.

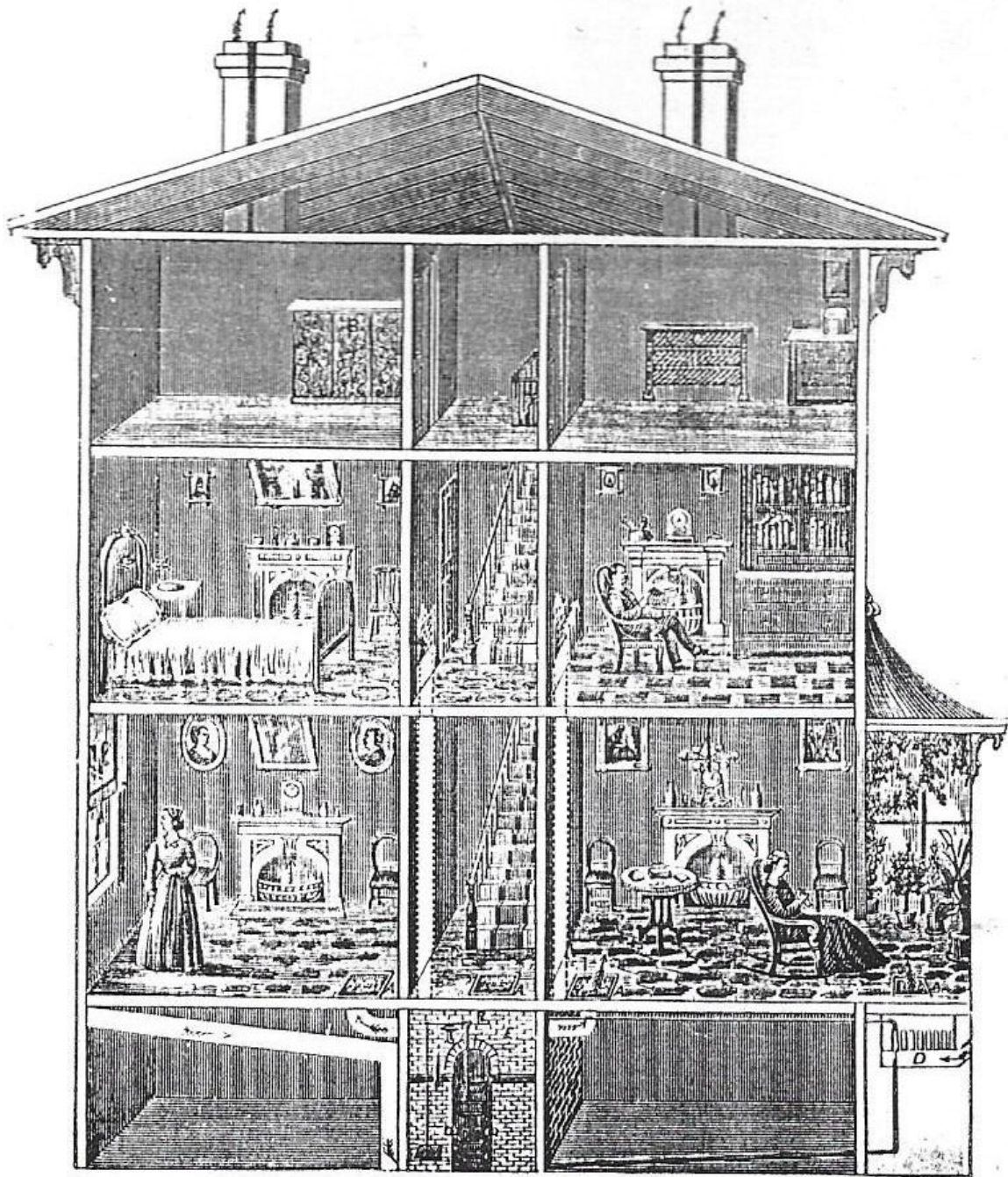
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