fe

81

b

p

A

8

n

V

C

b

p

a

C

b

portion to the increasing cold from one season to another, and the same bulk of air made either luke warm or of a much higher temparature according to requirements.

The *inventor* has already erected several hot air furnaces according to his own plans, different in each case, for the sake of practical experiment, and at each successive trial it was found advantageous to approach more and more to the present improved form of the *hot air tubular furnace*.

The *inventor* is also engaged at the present moment in erecting his improved heating apqaratus in several private and public buildings in the district of Quebec (Canada East) where, as is well known, on account of the severe cold of winter, an economical and easy mode of heating is more desirable than elsewhere because of the great cost and increasing scarcity of fuel.

In conclusion of these explanatory remarks, the *inventor* would recall the fact that the great defect of all the now existing furnaces is their want of surface to absorb the heat from the products of combustion before they reach the chimney, and so true is this statement that in almost all of them the smoke enters the chimney flue at from  $300^{\circ}$  to  $400^{\circ}$