WHAT IS CLAIMED IS:

1. A furnace configured to burn paper, comprising:

an outer barrel having an upper sealing wall, a lower sealing wall, and a barrel wall connecting the upper sealing wall to the lower sealing wall, wherein the barrel wall is formed with an upper wall section and a lower wall section connecting with each other, a surrounding air intake is formed between the upper wall section and the lower wall section, the upper wall section and the lower wall section are respectively provided with a sealable placement opening and a sealable ash removal opening, and a plurality of exhaust holes are formed on an upper portion of the upper wall section;

an inner barrel disposed in an interior of the outer barrel~~, being in a generally U shape,~~ and having a cone-like top wall and a side wall extending downward from an outer edge of the top wall, wherein an upper portion of the side wall is in tight contact with the upper wall section of the barrel wall of the outer barrel, and a ventilating space is formed between a lower portion of the side wall and the upper wall section, an placing opening corresponding to the placement opening and a plurality of vent holes corresponding to the ventilating space are disposed on the side wall, and the ventilating space are in communication with an interior of the inner barrel through the vent holes, a plurality of heat dissipation holes are disposed on the top wall, and an ash discharge opening is located at a central location; and

a support frame disposed in the interior of the inner barrel to support paper and positioned lower than the placing opening but higher than the surrounding air intake;

wherein air entering through the surrounding air intake enters the inner barrel respectively through the vent holes and from below the

inner barrel, and the incoming air in the inner barrel generates vortex and is discharged through the heat dissipation holes on the top wall and the exhaust holes on the upper wall section.

2. The furnace of claim 1, wherein the top wall comprises of a flat top section and a slanted top section, the heat dissipation holes distribute over the slanted top section, the ash discharge opening is located at a central position of the slanted top section, the side wall extends downward and obliquely inward from the top wall, and a distance between the side wall and the upper wall section gradually increases from top to down to form the ventilating space.
3. The furnace of claim 2, wherein the barrel wall is further formed with a plurality of connecting members, and the connecting members are connected respectively with the upper wall section and the lower wall section to form the surrounding air intake between the upper wall section and the lower wall section.
4. The furnace of claim 3, wherein the support frame is formed by a plurality of metal bars connected and spaced apart, and a central location thereof is formed with a plurality of protruding members for naturally moving the paper toward and depositing the paper at an outer edge of the support frame when the paper is placed on the support frame, and space between the metal bars promotes ventilation to help burning of the paper and to prevent smoldering.

WHAT IS CLAIMED IS:

1. A furnace configured to burn paper, comprising:

an outer barrel having an upper sealing wall, a lower sealing wall, and a barrel wall connecting the upper sealing wall to the lower sealing wall, wherein the barrel wall is formed with an upper wall section and a lower wall section connecting with each other, a surrounding air intake is formed between the upper wall section and the lower wall section, the upper wall section and the lower wall section are respectively provided with a sealable placement opening and a sealable ash removal opening, and a plurality of exhaust holes are formed on an upper portion of the upper wall section;

an inner barrel disposed in an interior of the outer barrel and having a cone-like top wall and a side wall extending downward from an outer edge of the top wall, wherein an upper portion of the side wall is in tight contact with the upper wall section of the barrel wall of the outer barrel, and a ventilating space is formed between a lower portion of the side wall and the upper wall section, an placing opening corresponding to the placement opening and a plurality of vent holes corresponding to the ventilating space are disposed on the side wall, and the ventilating space are in communication with an interior of the inner barrel through the vent holes, a plurality of heat dissipation holes are disposed on the top wall, and an ash discharge opening is located at a central location; and

a support frame disposed in the interior of the inner barrel to support paper and positioned lower than the placing opening but higher than the surrounding air intake;

wherein air entering through the surrounding air intake enters the inner barrel respectively through the vent holes and from below the

inner barrel, and the incoming air in the inner barrel generates vortex and is discharged through the heat dissipation holes on the top wall and the exhaust holes on the upper wall section.

2. The furnace of claim 1, wherein the top wall comprises of a flat top section and a slanted top section, the heat dissipation holes distribute over the slanted top section, the ash discharge opening is located at a central position of the slanted top section, the side wall extends downward and obliquely inward from the top wall, and a distance between the side wall and the upper wall section gradually increases from top to down to form the ventilating space.
3. The furnace of claim 2, wherein the barrel wall is further formed with a plurality of connecting members, and the connecting members are connected respectively with the upper wall section and the lower wall section to form the surrounding air intake between the upper wall section and the lower wall section.
4. The furnace of claim 3, wherein the support frame is formed by a plurality of metal bars connected and spaced apart, and a central location thereof is formed with a plurality of protruding members for naturally moving the paper toward and depositing the paper at an outer edge of the support frame when the paper is placed on the support frame, and space between the metal bars promotes ventilation to help burning of the paper and to prevent smoldering.