

(No Model.)

A. FAIRGRIEVE.
TOASTER.

No. 579,050.

Patented Mar. 16, 1897.

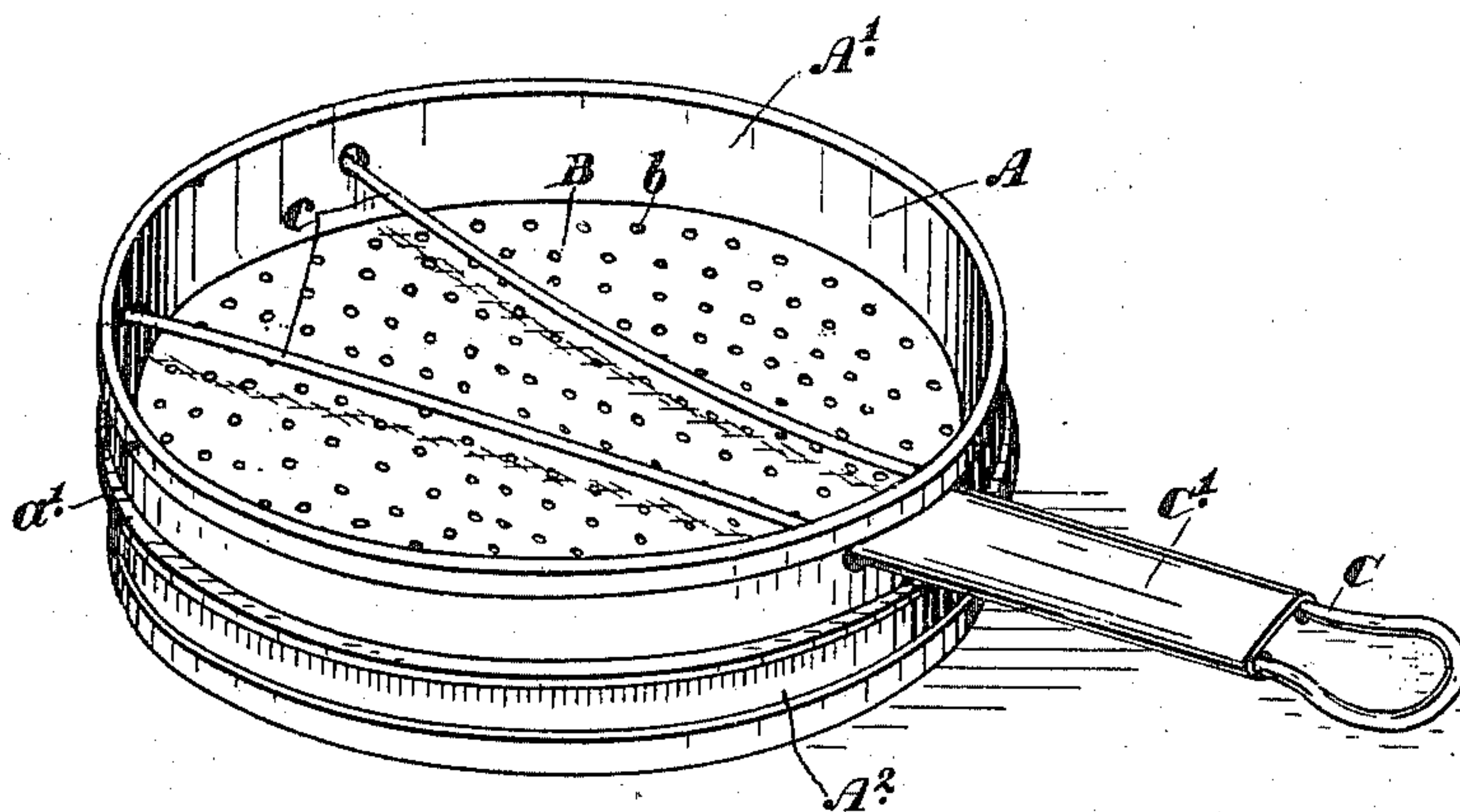


Fig. 1.

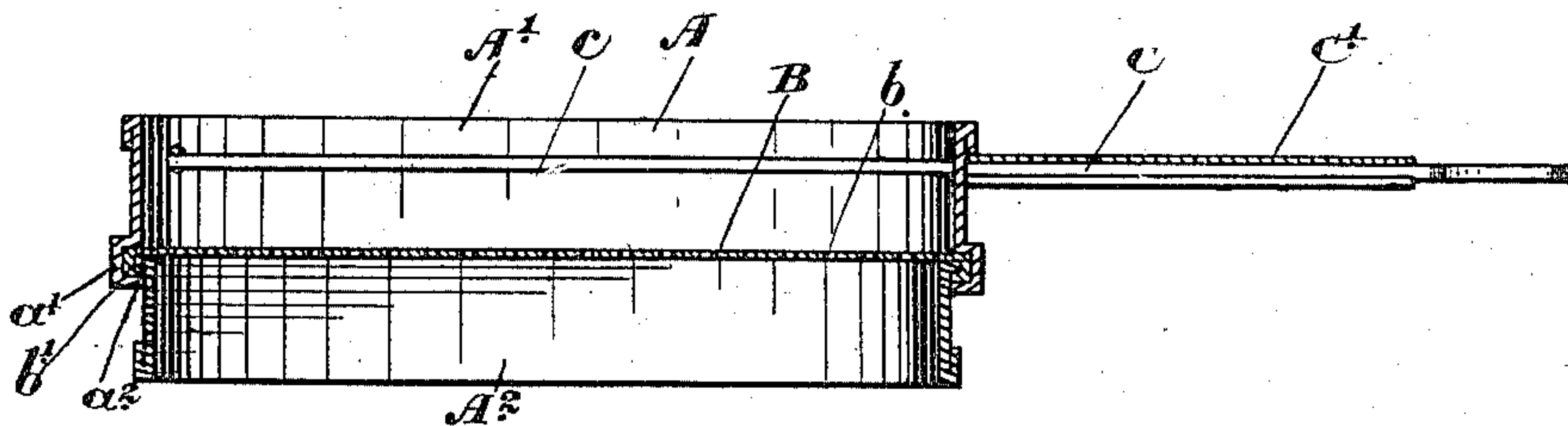


Fig. 2.

Witnesses.

Alfred Scott
H. Dennison

Inventor.

A. Fairgrieve
by F. H. Stonhaugh & Co.
Attys.

UNITED STATES PATENT OFFICE.

ARCHIBALD FAIRGRIEVE, OF TORONTO, CANADA, ASSIGNOR OF TWO-THIRDS TO JOHN W. CAMPBELL AND WILLIAM KIRKPATRICK McNAUGHT, OF SAME PLACE.

TOASTER.

SPECIFICATION forming part of Letters Patent No. 579,050, dated March 16, 1897.

Application filed October 8, 1896. Serial No. 608,211. (No model.)

To all whom it may concern:

Be it known that I, ARCHIBALD FAIRGRIEVE, tinsmith, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Toasters, of which the following is a specification.

My invention relates to improvements in bread-toasters; and the object of the invention is to design a simple, cheap, and efficient toaster, more particularly for use over gas-stoves, in which it will be impossible for the bread to be reached by the flame and be impregnated with the gas in such flame; and it consists, essentially, in making the toaster preferably in ring form of peculiar construction and providing a diaphragm made of flat sheet metal provided with perforations, a suitable wire handle being provided for the reception of the toast, as hereinafter more particularly explained.

Figure 1 is a perspective view of a toaster made in accordance with my invention. Fig. 2 is a section through the toaster.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the ring, which is made, preferably, of sheet metal and in two portions A' and A². The top portion A' has a U-shaped bottom edge a' extending entirely around the periphery.

B is a diaphragm made of sheet metal having perforations b. These perforations are shown in the drawings exaggerated both as to size and as to distance apart, they being in reality very close together. The diaphragm B is formed of perfectly flat sheet iron or metal tinned. The outer edge b' is U-shaped and fits within the U-shaped lower edge a' of the upper portion A'. The lower portion A² has an outwardly-extending lip a², which fits within the U-shaped edge b', formed at the edge of the diaphragm B.

In assembling the parts the upper lip on the lower ring has the U-shaped portion of the diaphragm spun around it, and this is fitted underneath the upper ring, the lower edge of which is spun up so as to form a U-shaped portion and securely binds the dia-

phragm and the previously-held lip in position.

All the parts are secured firmly together in a simple and economical manner.

C is a handle which is made of a wire which extends through suitable openings in the upper portion A' across the ring at a desired distance above the diaphragm B. The inner end c of the handle C forms a rest for the reception of the toast. A sheet-metal grip C' is provided outside the ring for convenience in grasping the handle when using the toaster.

I am aware that similar handles have been made for similar articles.

I am also aware that sheet metal has been used unperforated for toasters, and I am also aware that wire mesh has been used, and I do not lay claim, broadly, to any such device. In toasters in which the wire mesh is used, however, it is well known that when the flame is turned on too strongly, which is quite a common occurrence, a certain amount of the gas fumes escape and pass through the mesh, giving the toast a gaseous taste and smell. In the form of toasters also in which the wire mesh is used such mesh will on account of the expansion and contraction of the wire of which it is formed soon break and burn out, leaving still larger spaces for the gas fumes to come through and thereby rendering the mesh of the toaster useless in a very little time.

In providing my toaster with a diaphragm comprising a sheet of iron with perforations I find after a great deal of experiment and subjecting my toaster to the severest test that the flame impinging upon the flat surface is deflected and kept beneath such surface, so that it is utterly impossible, no matter how strong the flame may be turned on, for such flame to pass through the perforations in the diaphragm. Consequently in the use of my toaster all danger from the rapid burning of the toast or the impregnating it with gas is entirely obviated. Again, in my toaster I also find in practice that the expansion and contraction of the metal is such that the diaphragm will not under any circumstances become broken and wear out,

thus insuring a durable article for the purpose herein set forth.

Although the flame in my toaster will not go through it will be readily understood that the
5 heat passes readily through the perforations, thus providing much more rapid and even results in the cooking of the toast with very much less consumption of gas than any toaster of which I am aware.

10 What I claim as my invention is—

1. A toaster comprising a cylindrical body, a perforated diaphragm arranged centrally thereof, said body having a slot in the wall thereof above said diaphragm, and a rest
15 formed of wire doubled intermediately the ends thereof being secured in the wall of said body opposite to said slot, and the bail por-

tion thereof being extended through said slot to form a handle, substantially as described.

2. In combination the upper portion A, the
20 rest supported in such portion, the U-shaped lower edge *a'* of such portion, the diaphragm B provided with perforations and having the U-shaped edge *b'* fitting within the U-shaped edge of the upper portion A' and the lower por-
25 tion A² having the upper outwardly-turned lip fitting within the U-shaped inwardly-turned edge of the diaphragm as and for the purpose specified.

ARCHIBALD FAIRGRIEVE.

Witnesses:

B. BOYD,

H. DENNISON.