



To all whom it may concern:
Be it known that J. Capelle
Duquet, of the city of Quebec, in the
Province of Quebec, Jeweller, have
invented:

Certain new and useful
improvements on telephones and
I do hereby declare that the
following is a full, clear and
exact description of the same;

The first part of my
invention relates to the application
of permanent magnets of round
or flat steel in the form of a bunch
or cluster to the body of a telephone

The

The second part of my invention relates to the peculiar shape given to the interior of the mouthpiece thereby giving more facility for the transmission of sound and adding to its acoustic properties.

Fig 1 is a section of the telephone.

Fig 2 is a part section of the mouth piece.

A. is the body of the instrument, containing the bundle of steel wire permanently magnetized and passing through the centre of the helix; B is the mouth piece; C is the bundle of permanently magnetized steel wire which is of the length of the instrument; H is the helix
wound

round round with fine copper
wire properly insulated; E is the
metallic membrane; F is the
screw on the head of the
instrument and on the mouth-
piece which connects them
securely together; G is the
connection; H is the wire from
the helix; I the wire of the
helix; J is the body of the
mouthpiece; K is the angle in
the interior of the mouthpiece
to give all the advantage possible
in the transmission of sound
L is the nut at the bottom of
the instrument to hold the
permanent magnets in position
M is the screw fitted at the
bottom of the magnets.

For the benefit of those
whom

whom it may concern and to enable
others to construct such a machine,
I make the body of the telephone
of any shape to hold the bundle
of permanent magnets with a
helix surrounding them at the top
immediately under the diaphragm
and a mouth piece fitted to the
body of the telephone by a
male and female ~~cover~~.

The underpart of the
opening in the centre of the mouth-
piece is of a conical shape the
angle of which is acute with the
perpendicular running through
the centre of the instrument. The
acute angle of the cone is for
the purpose of deflecting the
sound produced by the diaphragm
to the acoustic centre of the opening
in

in the mouthpiece and thence to the ear of the listener.

I am aware of bundles or clusters of permanent magnets being in use in many cases, in various ways and for various purposes, consequently I do not claim them as my invention, but what I claim as my invention is

1^o The combination of a bundle or cluster of permanent steel magnets (of any shape) with the body of a telephone, as set forth and described.

2^o The angles K inside the mouthpiece arranged as described and for the purposes set forth.

Ottawa 1 February 1878

In the presence of

E. M. Little

W. S. Carter

Chas. S. Smith

This