five feet depth of water, this estimate comes within 514
21 cents per mile of theirs, long since published.

As success, in every great enterprise, whether of slow
or rapid progress, depends on the stability with which it
is conducted, and that essentially rests on a thorough
understanding of the principles on which it is founded,
and a steady adherence to them in its subsequent prose-
cution, the Board ask to be indulged in some reflections
on the enlarged plan which they have, after much consi-
deration, adopted, and partly executed, for the canal con-
fided to their superintendence.

The plan for this canal originally pressed upon the
Chesapeake and Ohio Canal Convention by a minority of
that body, and derived from the suggestions of Messrs.
Moore & Briggs, limited the breadth of water at its sur-
face to 32 feet, and its depth to 4; and such are the actual
dimensions of the plan adopted, by the Commonwealth
of Virginia, for the extension of the canal of James river
above its coal mines and the town of Lynchburg.

The convention fixed upon, and the charter adopted as
a minimum, a breadth of 40 feet at the surface, with a
depth of 4 feet water.

The Engineers of the United States made their estimate
for a canal which was to be generally 48 feet at the sur-
face, and with a depth of 5 feet. All allusion to the bot-
tom of the canal is excluded from these details, because
the surface being given, it depends on the depth of water
and the inclination of the inner slope of the banks; and
this must be determined by the nature of the earth
through which the canal is conducted, unless its banks
be sustained by an inner pavement or lining of stone or
wood.

By this Board, it has been resolved, to extend the
breadth of the surface of the water, in this canal, as far
as Harper's Ferry, to 60 feet; its depth to 6, and its
breadth at bottom to 42 feet, giving 306 feet for its cross
section, and 59,840 cubic yards for the contents of the
prism, for a mile in length, below its water line.

The dimensions of the New York, Pennsylvania, and
Ohio Canals, give a gross section of 136 feet, and a wa-
ter prism of 26,595⅝ cubic yards per mile.

The prism recommended by the United States' Board
of Internal Improvement, for the Chesapeake and Ohio
Canal, its cross section being 202.5 square feet, affords
39,000 cubic yards in the mile.

Notwithstanding the different dimensions of these