

germs, and boiling it for half an hour did not appear to affect their vitality. Filtration through a good bed of animal charcoal seems to be the only effectual mode of removing them; but it is necessary to air the charcoal from time to time, else it loses its purifying power.

The subject is being more thoroughly investigated by this able chemist, who thinks that wherever the described germs occur in water they are distinct evidence of sewage contamination.

GRAIN-BINDING BY MACHINERY.

The *Chicago Republican* gives an interesting account of the successful trial of a new machine for binding as well as cutting grain. It is the invention of Mr. S. D. Carpenter of Fond-du-Lac, Wisconsin, and was tested purposely in a very miscellaneous harvest field, where hills and hollows, rough and smooth places alike, were to be found. It was tried upon tangled as well as upstanding grain, also upon grain in various degrees of ripeness. In every instance it is reported to have done its work well, and it is estimated that in an ordinarily clear and level field, a span of horses will cut and bind 8 or 10 acres per day. We trust that further experiments will confirm these reports, and that we may soon have binding as well done in the harvest field by machinery as cutting is.

AGRICULTURAL EXHIBITIONS FOR 1870.

CANADA.

QUEBEC.....	Montreal.....	Sept. 13-16.
Peterborough (Hort).....	Peterborough.....	Sept. 14.
MIDDLESEX, West.....	Strathroy.....	Sept. 21.
Galt (Hort.).....	Galt.....	Sept. 22.
OTTAWA.....	Ottawa.....	Sept. 21-23.
Blandford and Wilmot.....	Hamburg.....	Sept. 23.
Pikington.....	Elora.....	Sept. 23.
Tuckersmith.....	Seaforth.....	Sept. 22-23.
Godrich (Hort).....	Godrich.....	Sept. 23.
Hay.....	Zurich.....	Sept. 23.
Dereham.....	Tilsonburgh.....	Sept. 26-27.
Muskoka Union.....	Bracebridge.....	Sept. 27.
Eramosa.....	Centre Inn.....	Sept. 27.
Knox, North.....		Sept. 27-28.
Minto.....	Harriston.....	Sept. 28.
Nottawasaga.....	Nottawa.....	Sept. 28.
Roxborough.....	Moose Creek.....	Sept. 28.
Williamsburgh.....	Bouck's Hill.....	Sept. 28.
E. MIDDLESEX & LONDON.....	London.....	Sept. 27-29.
HURON, North.....	Clinton.....	Sept. 27-28.
HURON, South.....	Exeter.....	Sept. 29-30.
Clifford.....	Clifford.....	Sept. 29.
Niagara.....	Niagara.....	Sept. 29.
Bluevale and Wingham.....		Sept. 30.
VICTORIA, South.....	Lindsay.....	Sept. 29.
Uxbridge.....	Uxbridge.....	Sept. 29-30.
WELLINGTON, Centre.....	Fergus.....	Sept. 29-30.
Mara and Rama.....		Sept. 29.
Fenelon.....	Fenelon Falls.....	Sept. 30.
PETERBOROUGH, West.....	Peterborough.....	Sept. 30 Oct. 1
Elma & Wallace.....	Listowel.....	Sept. 30.

Nassagaweya.....	Haltonville.....	Sept. 30.
Mariposa.....	Oakwood.....	Oct. 1.
HASTINGS, North.....	Woodstock.....	Oct. 3-4.
OXFORD, North.....	Woodstock.....	Oct. 3-4.
PROVINCIAL.....	Toronto.....	Oct. 3-7.
Wellesly.....	Wellesly.....	Oct. 3.
NEW BRUNSWICK.....	Fredericton.....	Oct. 4-7.
Arran.....	Tara.....	Oct. 5.
Proton.....	Cedarville.....	Oct. 6.
BRUCE, North.....	Paisley.....	Oct. 7.
West Zorra.....		Oct. 7.
NORTHUMBERLAND, East.....	Warkworth.....	Oct. 10-11.
BRUCE, South.....	Walkerton.....	Oct. 11-12.
Elma.....	Elma.....	Oct. 11.
Hibbert.....	Hibbert.....	Oct. 11.
OXFORD, South.....	Otterville.....	Oct. 11-12.
PERTH, South.....	St. Mary's.....	Oct. 11-12.
Simcoe.....	Simcoe.....	Oct. 11.
WATERLOO, North.....	Berlin.....	Oct. 11-12.
WELLINGTON, North.....	Arthur.....	Oct. 11.
YORK, East.....	Markham.....	Oct. 11-12.
Barton and Glanford.....	Glandford.....	Oct. 11.
Puslinch.....	Aberfoyle.....	Oct. 11.
Oxford.....	Duart.....	Oct. 11.
Harwich.....	Blenheim.....	Oct. 11.
East Wawanosh.....		Oct. 11.
West Williams.....	Park Hill.....	Oct. 11.
WELLAND.....	Welland.....	Oct. 11-12.
HALDIMAND.....	Grafton.....	Oct. 12.
PETERBOROUGH, East.....	Norwood.....	Oct. 10-11.
ONTARIO, South.....	Whitby.....	Oct. 11-12.
BRANT, North.....	Paris.....	Oct. 11-12.
VICTORIA, North.....	Cambray.....	Oct. 12.
Blyth.....		Oct. 12.
HASTING.....	Belleville.....	Oct. 12-13.
WENTWORTH & HAMILTON.....	Hamilton.....	Oct. 12-13.
Derby.....	Kilsyth.....	Oct. 13.
Thorah.....	Beaverton.....	Oct. 13.
Grimsby.....	Grimsby.....	Oct. 13.
DURHAM, West.....	Bowmanville.....	Oct. 13-14.
NORFOLK.....	Simcoe.....	Oct. 13.
PERTH, North.....	Stratford.....	Oct. 13-14.
Kinloss.....	Lucknow.....	Oct. 13.
Artemisia.....	Flesherton.....	Oct. 13.
Kinloss.....		Oct. 13.
Mono.....	Orangeville.....	Oct. 14.
South Monaghan.....	Bloomfield.....	Oct. 14.
NORTHUMBERLAND, West.....	Coburg.....	Oct. 13-19.
Darlington.....		Oct. 27-28.
LINCOLN.....	St. Catharines.....	Oct. 18-19.

UNITED STATES.

Vermont.....	Burlington.....	Sept. 6-9.
New England.....	Manchester N.H.....	Sept. 6-9.
American Institute.....	New York City.....	Sept. 9-No. 2
Ohio.....	Springfield.....	Sept. 12-16.
Iowa.....	Keokuk.....	Sept. 12-16.
Michigan.....	Jackson.....	Sept. 20.
Illinois.....	Decatur.....	Sept. 26-Oct. 1.
Wisconsin.....	Milwaukee.....	Sept. 27-30.
Woollen Exposition.....	Cincinnati.....	Sept. 21-Oct. 15.
New York.....	Utica.....	Sept. 27-30.
Northern Ohio.....	Cleveland.....	Oct. 4-7.
Kentucky.....	Henderson.....	Oct. 4-7.
North Carolina.....	Raleigh.....	Oct. 18-21.
Georgia.....	Atlanta.....	Oct. 19-26.

The last number of the *Nova Scotian Journal of Agriculture* gives a very favorable report of the crops in that Province. Most of them, especially the grain crops, are better than usual.