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? WHY THE WEATHER ?

By Dr. Charles F. Brooks
of Clark University.

DAMP CELLARS

Perhaps you wonder why your cellar stays so damp in summer, and why it often fails to dry out, even when the doors and windows are opened wide on hot, sunny days. Where does the moisture come from?

Of course, after heavy rains, water may leak in from the ground, but most of the dampness is condensed out of the warm outdoor air, which is introduced to dry the cellar. On hot, muggy days, the dewpoint of the air may be 60 degrees Fahrenheit, or even 70 degrees, well above the temperature of the cellar walls and floor. Dew, then, will form on the floors, walls, and particularly on the cold water pipes, just as it would on a glass of cool water. A certain bank, one hot day, found its safe deposit vaults, ventilated by a system of fans, getting very damp. On this day the dewpoint was 70 degrees Fahrenheit, and the temperature in the vaults about 65 degrees. To dry the vaults, the fans were speeded up, which only brought in more warm air carrying more moisture. The safe doors rusted and the floors became slippery and wet.

If you would have your cellar as dry as possible, keep it tightly closed on hot, moist days, even though the sun may be shining. But on a cool, dry night, or cool, cloudless day with a northwest wind, ventilate it thoroughly.

(Tomorrow: How Far Thunder Can Be Heard)

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B and 21st Sts.,
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