

OTTAWA VALLEY
(CHAPTER)

ATTENDANCE:

MEMBERS	<u>19</u>
VISITORS	<u>7</u>
TOTAL	<u>26</u>

B. Stotesbury
PRES.

AMERICAN SOCIETY OF HEATING
AND VENTILATING ENGINEERS

TOTAL NO. CHAPTER MEMBERS ON ROLL

RETAIN WHITE COPY FOR CHAPTER FILE

- A CHECK LIST OF ITEMS TO BE REPORTED
- 1. PRESIDING OFFICER
- 2. CALL TO ORDER (TIME & PLACE)
- 3. ROLL CALL
- 4. APPROVAL OF MINUTES
- 5. REPORTS
- 6. ELECTION MEMBERS OFFICERS
- 7. OLD BUSINESS
- 8. NEW BUSINESS
- 9. SPEAKER (TITLE) (BUS.) (CITY) SUBJECT
- 10. DISCUSSION
- 11. MOTIONS
- 12. RESOLUTIONS
- 13. OTHER FEATURES
- ADJOURNMENT

The regular monthly meeting was held in the dining room of the Prescott Hotel. The chair was occupied by B. Stotesbury. At the dinner a toast was presented to the Queen and to the Office of the President of the United States. The visitors were introduced by the chairman, namely Messers John Ruddy, Samuel Lamport, A.G. Wilson, S.J. Gray, C.A. Sanderson, W.B. White and M. Morgan. Following the dinner a brief recess was held.

The business meeting opened with the reading of the previous minutes. A motion by John Massiah and seconded by Bill Hodgins "That the minutes be accepted as read" carried. The treasurer reported a balance of \$86.60. A motion by Roy Soderlind seconded by Geo. Ostiguy "That the treasurers report be accepted" carried. The Secretary than reported that the Board of Governors passed a motion as follows "That the regular monthly meetings start at seven o'clock, but that the meeting room would be open to members before this time" Geo Ostiguy then gave a brief outline of the next meeting and on a motion by Wm. Robinson and seconded by Ross Hamilton "That a joint meeting be held with the Institute of Power Engineers at our next regular meeting March 17th" carried. The secretary than read a letter from the Montreal Chapter announcing that they are holding their Spring Golf Meeting Thursday June 25th at the Lachute Golf and Contry Club. On a short discussion it was decided to leave the matter of a joint golf meeting with the Board of Governors, and the question of prizes and expenses in their hands. The secretary and also the treasurer spoke on the past golf meetings held at Lachute with the Montreal Chapter and encouraged as many get out to this big event.

Mr. Don Banton then introduced the guest speaker, namely Frank A. Joy, Professor of Engineering at the Pennsylvania State College, that he held a B.S. in Mechanical Engineering from the University of New Hampshire. That he was associated with the General Electric Company, The Public Service Co., of New Hampshire and that he served in the U.S. Navy. That his work was with water vapor migration and condensation in construction.

Professor stated that much has been found out in the past on moisture penetration, particularly as it applies to moisture condensation within building walls, but much more has to be found out to overcome the damage done by this problem. In wood structures condensation presents the problem of mould, rot, warping, swelling etc. Then there is the blistering of paint caused by too much water in the wood, finding its way by condensation or rain. If insulation becomes wet forming ice, and in the case of rock wool settles, causing air and cold infiltration or even the wall to burst out. The source of moisture is found in outside temperature and humidities, efficiency of the insulation, inside atmosphere, and resistance of the outer wall to vapor.

(over)

Thus rain and high outside humidities may enter the wall. Efficiency of insulation is illustrated by the vapor passing through from the inside striking the cold wall and condensing on the sheathing and if the sheathing cannot absorb the moisture it will back up into the insulation. Inner wall vapors are formed by kettles, cooking, washing and breathing. In breathing alone a family of four produces 25 pounds of water a day. Laundries should be very well ventilated and textile mills etc., should have a vapor protection for protection from the high humidities.

The transmission of heat and vapor through a wall should be considered together and in most cases the proper combination of insulation and vapor barriers will eliminate the possibility of condensation within the walls. A consideration often overlooked in problems of condensation within walls is that a vapor barrier should be placed on the warm side of the insulation and not the cold side of the wall. Walls should be ventilated.

The property of a material to transmit vapor is known as its vapor permeability. Thus a formula has been found to calculate the moisture flow through walls. Thus gypsum, paper, wood, paint with a water base have high perm. and waterproof paper, oil paint, metal foil insulation have a low perm.

Much has been done in the Laboratory to determine the effect of vapor barriers and the vapor pressure deterioration. Corrections have to be found to help existing walls from condensation. Another factor requiring experiment is the amount of ventilation required within a wall. A question and answer period followed.

Professor Joy was thanked by John Messiah.

On a motion made by Len Greenough and seconded by Chas. Watson "That the meeting adjourn" Carried.

M. Greenough