

**OFFICIAL PROCEEDINGS OF THE  
TENTH ANNUAL CONVENTION  
HELD AT HOLLENDEN HOTEL  
CLEVELAND, O. MAY 23RD,  
24TH, 25TH AND 26TH, 1916**

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**MASTER BOILER MAKERS ASSOCIATION**

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**HON. DANIEL A. LUCAS**  
President-elect

# Master Boiler Makers Association



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of the

**Tenth Annual Convention**

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**HOLLENDEN HOTEL**

**CLEVELAND, O.**

**May 23rd, 24th, 25th and 26th, 1916**

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## SUBJECTS AND COMMITTEES FOR 1917 CONVENTION

(Subject to Future Changes).

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1. "PROPER METHOD OF THREADING RADIAL STAYS AND TAPPING OUT HOLES IN BOILER FOR SAME. IS IT NECESSARY TO GIVE RADIAL STAYS THE SAME LEAD AS THE TAP WITH WHICH THE HOLES WERE TAPPED?"—Thomas W. Lowe, Chairman; J. B. Smith and C. L. Hempel.

2. "WHICH IS THE BETTER METHOD OF DRILLING TELL TALE HOLES, BEFORE OR AFTER APPLICATION OF BOLTS? WHICH IS THE BETTER METHOD OF DRILLING FOR EITHER CASE. WHAT IS BEST STYLE OF DRILL FOR OPENING UP TELL TALE HOLE IN OLD STAYBOLTS? DOES IT PAY TO USE HIGH SPEED STEEL FOR THIS PURPOSE? WHAT IS BEST LUBRICANT FOR THE DRILL?"—Bernard Wulle, Chairman; Frank Fischer and W. M. Wilson.

3. "EFFECT OF PROPER UPKEEP OF FRONT END DRAFT APPLIANCES ON FUEL ECONOMY. METHOD USED IN DETERMINING PROPER DESIGN FOR VARIOUS CLASSES OF LOCOMOTIVES."—C. R. Bennett, Chairman; P. F. Gallagher and William George.

4. "BEST METHOD OF BENDING SUPERHEATER UNITS AND KIND OF TOOLS USED FOR GRINDING BALL JOINTS OF SUPERHEATER UNITS AND HEADERS. HOW CAN WEARING AWAY OF SUPERHEATER UNIT RETURN BENDS BE OVERCOME."—M. J. Guiry, Chairman; A. N. Lucas and Andrew Hedberg.

5. "THE MERIT OR DEMERIT OF THE VARIOUS PATENTED METHODS OF APPLYING BOILER TUBES, COMPARED WITH PRESENT METHOD OF APPLICATION."—J. L. Downs, Chairman; C. Browning and Adolph Feisner.

6. "WHAT IS THE BEST TYPE OF WASH OUT PLUG, ARCH TUBE PLUG OR CAP TO BE USED IN ORDER TO OVERCOME LEAKING, WHEN BOILER IS UNDER PRESSURE? KIND OF THREAD, NUMBER OF THREADS PER ONE INCH AND TAPER PER FOOT?"—C. J. Elk, Chairman; John Howe and F. A. Batchman.

7. "WHICH FIREBOX STEEL GIVES THE BEST RESULTS FROM ACTUAL SERVICE TEST, STEEL HAVING A TENSILE STRENGTH OF FROM 48,000 TO 58,000 POUNDS OR 55,000 TO 65,000 POUNDS PER SQUARE INCH?"—Henry J. Raps, Chairman; J. J. Keogh and T. J. Reddy.

8. "WHAT IS THE BEST METHOD FOR SCALING SUPER-HEATER FLUES IN THE BOILER? WHAT IS THE BEST METHOD OF RATTLING FLUES? WHAT IS THE BEST METHOD OF HANDLING FLUES IN AND OUT OF THE RATTLER? HOW MANY REVOLUTIONS PER MINUTE SHOULD THE RATTLER MAKE FOR TWO INCH AND FIVE AND THREE-EIGHTHS INCH FLUES? DESCRIBE METHOD FOR SAFE ENDING SUPERHEATER FLUES."—John B. Smith, Chairman; W. H. Evans and George G. Fischer.

9. "WHAT PRESSURE SHOULD BE USED ON HYDRAULIC RIVETERS FOR VARIOUS SIZE RIVETS? FOR WHAT PURPOSE DOES IT PAY TO USE POWER RIVETERS OF THE SMALLER SIZES? WHAT DEGREE OF CONE HEAD RIVET SET GIVES THE BEST RESULTS USED IN CONJUNCTION WITH HYDRAULIC RIVETERS AND LONG STROKE RIVETING HAMMER?"—Andrew Greene, Chairman; Charles E. Frick and L. Fenstermaker.

10. "WHAT IS THE BEST STYLE GRATE FOR BITUMINOUS COAL? WHERE SHOULD THE DUMP GRATE BE LOCATED: (A) IN ROAD ENGINES, (B) IN SWITCH ENGINES? WHAT SHOULD BE THE PERCENTAGE OF OPENING IN GRATES? WHAT SHOULD BE THE PERCENTAGE OF DRAFT OPENING IN ASH PANS, COMPARED WITH AREA OF FIREBOX?"—S. E. Westover, Chairman; John B. Tate and Alex J. Cunningham.

11. "WHAT SHOULD BE THE MINIMUM DISTANCE BETWEEN GRATES AND LOWER BEND OF ARCH TUBES FOR THE DIFFERENT CLASSES OF LOCOMOTIVES. WHAT IS THE PROPER DISTANCE FROM DOOR SHEET TO BRICK-ARCH AND FROM CROWN SHEET TO BRICK ARCH FOR THE VARIOUS CLASSES OF LOCOMOTIVES?"—Charles P. Patrick, Chairman; John Harthill and H. V. Stearns.

12. "WHAT IS THE BEST METHOD OF BRACING LOCOMOTIVE TENDERS? DESCRIBE METHODS USED."—H. J. Wandberg, Chairman; Andrew Hedberg and Frank Gray.

13. "OXY-ACETYLENE WELDING."—L. M. Stewart, Chairman; B. F. Sarver, Mr. Thomas and R. W. Clark.

14. "ELECTRIC WELDING."—P. F. Gallagher, Chairman; Wm. R. Downs, Frank Griffin, P. S. Hursh and C. Ryan.

15. "TO OBTAIN AN EXTENSION OF TIME NOW REQUIRED TO AT LEAST THREE YEARS, REQUIRED FOR THE REMOVAL OF CAPS WITH FLEXIBLE STAYBOLTS."—C. N. Nau, Chairman; T. P. Madden, Bernard Wulle and C. P. Patrick.

16. "WHAT IS THE ADVANTAGE OF CUTTING OFF STAY ENDS WITH OXY-ACETYLENE OVER THE OLD METHOD OF NIPPERS AND CHISEL?"—Thomas Lewis, Chairman; L. Borneman, A. N. Lucas and W. G. Bower.

17. "LAW."—George W. Bennett, Chairman; M. O'Connor and James T. Goodwin.

18. COMMITTEE ON TOPICS FOR 1918 CONVENTION.—John F. Raps, Chairman; D. G. Foley, George Austin and M. J. Guiry.