THE LOCOMOTIVE ENGINEER'S "TORCH".

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The Locomotive Engineer's "torch". by Frank C. Smith

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FRANK C. SMITH

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FRANK C. SMITH, M.E., B.L.E.

NEW YORK:

GEO. H. FROST, Publisher.

1880,

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PREFACE.

This book is not written for locomotive engine builders, nor does it profess to be an exhaustive treatise on the art of locomotive running. Its province is, simply to discuss such points of interest to the locomotive engineer as the writer happens to be acquainted with.

The writer has no apology to make in offering this book to the knights of the throttle lever, for the same will not enhance its merits (if it has any), nor make its errors less apparent.

F. C. S.

DELAWARE, O., July 1st, 1880.

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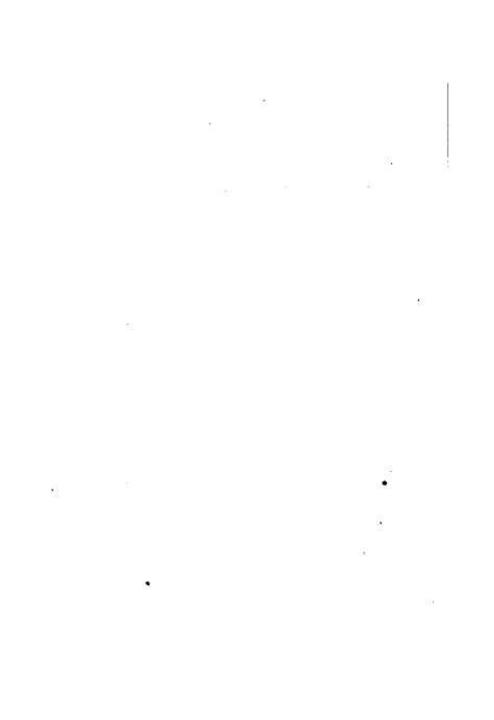
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FIRING UP.

An engine, after standing in the house for several days, becoming completely cold, is liable to smoke around the fire-door on being fired up, until the dampness in the flues, etc., is expelled. If a light fire of shavings is started in the front end, or smoke arch, and kept burning until the stack is warmed up, it will greatly facilitate the draft through the fire-box and flues, and in a great measure do away with a smoky cab while the fire is getting under way.

CYLINDER PACKING.

Without doubt, the old-fashioned packing (rings and springs) is superior to any steam or self-setting packing. With steam packing, the rings are forced out against the cylinder in proportion to the pressure in the cylinder. Thus, with the reverse lever in the six-inch notch the rings press the cylinder at a pressure due nearly that of the boiler pressure for six inches of the stroke, and as the cylinder pressure is