SHOP FORGE has electric blower

A SSEMBLED entirely from discarded materials, this forge consists essentially of an old vacuum-cleaner motor and blower, and a cast-iron sink. The dimensions given may be altered to suit the material at hand. The air blast from the blower is divided, half of the air being diverted up the stack to keep the shop clear of smoke, the Y-fitting for this purpose having been taken from a Ford V-8 exhaust pipe. The original strainer in the sink serves as the tuyere iron, and a $1\frac{1}{2}$ -in. street elbow connects the sink with the draft pipe. The cast iron ring that originally held the lead pipe to the sink outlet can be used to hold the street elbow if it is enlarged slightly. By using wingnuts on the bolts, it is an easy matter to remove the elbow for cleaning out ashes and cinders. A piece of flexible tubing run up the hood from the Y-connection and strapped to it completes this part of the job. The

hood itself is made from a single piece of sheet metal. The addition of brackets and a "douse" tank completes the forge. The switch for controlling the motor is protected with a sheet-metal cover and gives three speeds. It is a good idea to line the inside of the sink with fire clay or some other refractory material.

WIRE

FOR RIVETING

110-V. LINE

8 WIRE ROLLED IN EDGE

3

3-SPEED

FAN SWITCH

Tabs around the smoke opening of the hood are drilled for screws to attach a ring and collar assembly, which takes a smokepipe

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CAST-IRON

METAL COVER

12-1

(4)

SINK 18"X30"

"ANGLE

VACUUM-

CLEANER

BLOWER

MOTOR AND

FIRE CLAY

16 WING

2 IRON

PATTERN FOR COLLAR

EXHAUST PIPE

FROM V-8 FORD

12×12×30"

ANGLE-IRON LEGS

SHEET METAL RING (2 REQ'D.)

ROD

NUTS

FIFX. STEEL

HEATER TUBE

CAST-

RON RING

ENLARGED SLIGHTLY

12 STREET

ELBOW

PATTERN

OR HOOD

COMPLETED COLLAR