

The
BULLETIN

SECOND PRESBYTERIAN
CHURCH

OXFORD, NEW JERSEY

By

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Remember the days of old, consider the years of many generations: ask thy father, and he will show thee; thy elders, and they will tell thee.—Deuteronomy, 32:7.

Bulletin No 401, March 6th, 1938

Who is a God like unto thee,
that pardoneth iniquity, and passeth
by the transgression of the remnant
of his heritage? he retaineth not
his anger for ever, because he de-
lighteth in mercy. ---Micah 7:18

"Forgive, O Lord, we beseech thee,
all that we have done amiss, all
that we have spoken falsely or in
anger, and all that we have thought
or purposed against thy will.

Forgive our ignorant and hasty
faults, our wilful and deliberate
offenses, and all our sins of sloth-
fulness and neglect. Forgive us
freely; forgive us graciously; forgive
us entirely: in the Name of our Lord
and Saviour Jesus Christ. Amen."

The Annual Supper by the men of
the congregation will be given in
the chapel on Monday evening, March
14th. Hot buckwheat and flour
pancakes with sausages will be the
main attractions, but other food
for those who may prefer it.

The Ladies have kindly offered
to furnish the dessert, as the men
have not advanced that far in the
art of cookery.

The Annual Canvass for the sup-
port of the church expenses for the
coming year will be made on Sabbath
March 20th.

The Easter Communion will come
on April 17th. Those who may wish
to be admitted to our communion at
that time should speak to the Pas-
tor as he plans to give some in-
struction to the new members.

Several persons have already made
application for that purpose, and
there will probably be many more
to do so.

The Cemetery Association will
have their next stated meeting on
Sunday March 13th. in the afternoon.

Hot-blast in Oxford Furnace

"The first practical application of the hot-blast in this country was made at Oxford Furnace in New Jersey in 1834, by William Henry the manager. The waste heat at the tump passed over the surface of a nest of cast-iron pipes, through which the blast was conveyed to the furnace. The temperature was raised to 250 degrees Fahrenheit, and the product of the furnace was increased about 10 per cent.

"In 1835 a hot-blast oven, containing cast-iron arched pipes, was placed in the stack by Mr. Henry, and heated by the flame from the tunnel-head. By this means the temperature of the blast was raised to 500 degrees.

"This innovation in American blast-furnace practice increased the product of Oxford furnace about 40 per cent, with a saving of the same per cent of fuel.

"No better device for heating the blast was used in this country until about 1840. Hot-blast ovens, supplied with cast-iron arched pipes of various patterns, were in general use in subsequent years down to about 1861."

The above quotation is made from "Iron in All Ages," by James M. Swank. Edition of 1884, page 326.

This volume is still the best history of the iron business and furnaces in this country up to the time of publication, and is recognized as an authority on the subject. The accurate details of the account of Oxford furnace's first use of hot-blast shows that Mr. Swank must have been in Oxford and got his information from Mr. Henry himself. In fact, we have in our research somewhere read that Mr. Swank was in Oxford, but forget where we saw it.

We call attention to the careful wording used by Mr. Swank. He does not say that Mr. Henry invented the hot-blast, as some histories assert.

In fact, it was invented by an Englishman, J.B. Neilson, in 1828.

Mr. Henry must have heard of this, as six years later he made his first application of the method. But 10 per cent increase of the product was not satisfactory, so with his genius for invention he changed the method of heating the blast, which Mr. Swank calls an innovation, which increased the product 40 per cent, with a saving of fuel to a like amount. This revolutionized the business of making iron from the ore. And on account of Mr. Henry's innovation in heating the blast, his service to the trade is recognized by mining engineers as of the highest importance.

To illustrate: In June 1933 we received a letter from Prof. Bradley Stoughton, in charge of the Metallurgical Engineering Department of Lehigh University, Bethlehem, Pa. requesting a picture of the old furnace, and saying: "I am now preparing a revision of my book entitled, The Metallurgy of Iron and Steel, of which about forty thousand copies have been sold, mostly as a textbook in colleges. I should like very much to include a picture of the old Oxford furnace." We sent him several new pictures of it, and a year later we examined a copy of the revised edition, and found the picture of the furnace near the first of the book. The remarkable thing to me at the time was that it was the only old furnace pictured in the whole book. Why was Oxford furnace thus singled out for this distinction?

I could not imagine at that time; and indeed, only last fall, while examining again, Mr. Swank's History, I for the first time discovered the account of Mr. Henry's use of the hot-blast, as quoted above. Then it, for the first time, dawned on me that it was on account of the fact that Oxford furnace had the distinction of first using hot blast, and so wonderfully improving the method of its use

So that to the mining engineers Oxford furnace has the great honor of first introducing and greatly improving the use of hot-blast in iron blast furnaces in this country.

All which adds a powerful motive for the preservation of the furnace by the State of New Jersey.

It should have been stated that the picture of the furnace in Dr. Stoughton's book has this legend under it:- "The hot-blast was used in this old furnace in Oxford New Jersey in 1834, by William Henry manager."

Mrs Frederick Fowler adds her tribute to Mrs. Lukens, saying:--

"I have often wanted to write some thing in regard to our happy times in Oxford, due to Mr. and Mrs. Lukens, (everybody's friend, as Mary Weber, calls her) was not sometimes doing nice things for us, but always.

Taking us to conventions, Missionary meetings, Bible studies in Belvidere to hear Dr. Stearns whom we all loved to hear, and eagerly drank in the wonderful things he taught us.

Sunday nights, after Church, were always bright spots for us to be invited over for supper, and then sing for an hour or so. And oh many, many things that made Oxford a great place to live in.

She surely was a Lady Bountiful with her Democrat (the merry-go-round, as Mr. Lukens laughingly called it). For she gathered in it as many as it would hold. And in regard to Mr. Lukens, I once heard Mr. Fowler say, "He could do more things and do them well than any man I ever knew."

I could keep right on, but must stop. One of her dearest friends,
Clara Kean Fowler.

Mr. Benjamin R. Pittenger has sent more historical notes for the Bulletin, that will be used in later issues. His ability and success in discovering new documents relating to Oxford history is truly remarkable. We are all under the greatest obligations to him, and hope he will continue the good work.

He also sends \$3.00 for the Bulletin fund. Many thanks.

