

BUSINESS AND PROFESSIONAL.

ROBERT B. GOULD
Civil Engineer



Bend, Oregon.

UNDERTAKER.

Licensed Embalmer,
Funeral Director,
Phone. Lady Assistant
C. P. NISWONGER, Bend, Ore.

F. H. THOMPSON, M. D.

Physician and Surgeon
Office on second floor of Bather
Building, Wall Street.

ROSS FARNHAM

Attorney at Law
Office in old First National Bank
Building.

MARION M. LESH

Nurse
Lot 11, Block 15, Center Addition
Bend, Oregon

THE J. H. HANER ABSTRACT CO.,
Incorporated.

Complete tract indexes and photo-
graphic copies of all Crook County
records.
Blueville, Oregon.

Nature Methods Chronic Disorders
and Dietary Advice A Specialty

DR. H. D. KETCHUM

Chiropractor,
Mechano-Therapist
Hours 9 to 5. 1 1/2 blocks East
of Bend Hotel.

W. W. FAULKNER, D. M. D.

DENTIST
O'Donnell Building
Bend, Oregon

U. C. COE, M. D.

Physician and Surgeon
Office over First National Bank
Office Hours: 10 to 12 a. m.; 1
to 3 and 7 to 8 p. m.
BEND, OREGON

C. S. BENSON

Attorney At Law
Office in old First National Bank
Building
Bend, Oregon

VERNON A. FORBES

LAWYER
First National Bank Building,
Bend, Oregon

GEORGE S. YOUNG

Civil, Mining and Irrigation
Engineer.
Oregon Street
Office with J. A. Eastes.

F. O. MINOR

Postoffice Building
LIFE-FIRE-ACCIDENT
INSURANCE
Notary Public and Conveyancing—All
Legal Papers Correctly Drawn
Fidelity Bonds.

M. J. MAIN

All Kinds of Blacksmith Work
Prices Reasonable
Minnesota St., Bet. Bond and Wall.

U. N. HOFFMAN

NOTARY PUBLIC
Hunter's and Angler's License Papers a
Specialty.
Bulletin Office, Bend, Oregon.

MISS EVA L. GRAVES

Teacher of
PIANO PLAYING
Residence Studio at Mrs. A. M. Lara's
Telephone.

Call

at OREGON STREET
SHOE
SHOP

G. F. HURT
Prop.

**Pilot Butte
Acreage**

Best and Lowest Priced
Acreage on the Market.
Handled by all reliable
real estate dealers.

J. H. Bean

Bend, Oregon

R. H. DEYARMOND

Machine Shop and
Garage

We know how to do all
kinds of Machine Work.
TRY US AND SEE.

**HOW TO BUILD A
SAND-CLAY ROAD**

It is by Far the Most Econom-
ical Kind of Highway.

BALANCE THE MATERIAL.

Plenty of Sand is Necessary and a
Good Water Resisting Clay For a
Binder—Plow Deep For a Good
Road, Says Expert.

The sand-clay road has been in use
from time immemorial, and yet the
study of it has been very recent. So
far as I know, the study was never
scientifically carried out prior to 1900.
says W. L. Spoon, road engineer of
Forayth county, S. C., in Southern
Good Roads. It was built in many
places throughout South Carolina, and
there are many discussions as to who
the inventor was.

Now, the sand-clay road or the soil
road, which is only a type, has shown
a substantial durability as well as a



MIXING THE SAND AND CLAY.

cheapness in first cost and a cheap-
ness in maintaining cost, or second
cost; consequently it is the best road
for country districts wherever con-
ditions will permit. One of the best
things about it is this—it is the most
capable of withstanding automobile
traffic, and the lateral or pull of the
wheel seems to do but little or no
harm. Then again it is the most de-
lightful road for the stock of the farmer
and the man who delights in driving.

How would you build this sand-clay
road? The first problem is to make a
thorough investigation of natural con-
ditions. Sand is the primary and the
fundamental thing in the building of a
sand-clay road. It is the all of a sand-
clay road. The clay merely furnishes
or forms a binder. The durability will
depend largely upon the texture of the
clay. If the clay is open and porous it
will sponge up and lose its grip on the
sand, and you have a slish or a muddy
road, but if you have a water resisting
clay and apply sand to the depth of
ten inches you have a road that is



A GOOD STRETCH OF SAND-CLAY ROAD.

easily kept in repair, more so than any
class of macadam road, and at a cost
that is very small in comparison.

The soil is turned over by plowing
process in the cultivation, brought to
the surface; the rain removes the easily
absorbed parts of clay and leaves
only that part which most firmly re-
sists the action of rain. Therefore
when you put it in the road you get a
cohesive mass that builds together
like cement almost. Now, really the
trouble with the soil road is if the ma-
terial is not right you put it down too
thin. You plow up six inches of soil
and you say at once you have a foot of
soil. It expands or opens up to almost
double its volume. If you want a soil
road of ten inches you must put down
fourteen inches of loose material, so
that when it is firmly welded together
you have a twelve inch road. If you
build that strong enough you will suc-
ceed nine times out of ten.

CHURCH NOTICES

Methodist Episcopal.

Rev. E. C. Newham, pastor. Ser-
vices every Sunday at 11 a. m and at
7:30 p. m. Sunday school at 10 a.
m. Epworth League at 6:45 p. m on
Sunday. Choir practice Thursday at
7:30 p. m. Prayer meeting Wednes-
day at 7:30 p. m. Junior League at
2:30 p. m. Sunday.

Presbyterian.

There will be services at the Star
Theatre Sunday morning, February
2, at 11 o'clock, Rev. Dr. Gorby, pas-
tor. Subject, "The Psychology of
Elementary Christian Experience."
Sunday school at 10 a. m., Ross Farn-
ham superintendent.

NOTICE TO TEAMSTERS.

Sealed bids will be received by R.
E. Koon, construction engineer for
the city of Bend, up to 10 o'clock a.
m. of Monday, the 10th day of Feb-
ruary, 1913, for furnishing teams
and wagons and hauling and deliver-
ing materials for sewer construction
from railroad to designated points
along the line of sewer construction.

Said materials will consist largely
of vitrified pipe but may include ce-
ment, sand, machinery, tools, powder
or other material required on said
construction work.

The approximate tonnage is 500
tons of 2000 pounds each.

The right is reserved to reject any
or all bids.

Bids for bidding purposes may
be obtained upon application. 47

**HOMESEEKER'S
LAND CO.**

We expect to do a
big business in ranch
lands this spring and
ask the farmers who
have confidence in us
to list their property
with us. We guar-
antee you the fairest
treatment, in ad-
vance. We have men
representing us in
every city of 200,000
in the United States.
Respectfully,

R. P. MINTER, Manager.

BEND DRUGGIST

DESERVES PRAISE.

The Patterson Drug Co. deserves
praise from Bend people for intro-
ducing here the simple buckthorn
bark and glycerine mixture, known
as Adler-ka. This simple German
remedy first became famous by curing
appendicitis and it has now been
discovered that A SINGLE DOSE re-
lieves sour stomach, gas on the
stomach and constipation INSTANT-
LY.

(Advertisement.)

**NOTICE TO PARENTS OR GUARD-
IANS OF SCHOOL CHILDREN.**

We wish to announce that the law
in reference to truants will be en-
forced in Crook county. We will
give all parents of truant children
until after the first of February to
make arrangements to place their
children in school. If this is not
complied with, we will let the law
take its course. We did not make
it, and we surely will not break it.
J. E. MYERS,
County School Supt.

DAILY TRAIN SCHEDULE.

Joint Oregon Trunk-Deschutes Line.
Arrival..... 6:45 P.M.
Departure..... 6:30 A.M.

**THE WHITE IS
KING**



The BEST all-round Family
Sewing Machine that can
be produced. Made in both
ROTARY and VIBRATOR
styles. The rotary makes
both LOCK and CHAIN
stitch. The latest up to
the minute steel attach-
ments with each machine.
Sold on easy payments.
Send name and address for
our beautiful H. T. cata-
logue free.

White Sewing Machine Co.
1460 Market Street
San Francisco, California

HOT BREAD

EVERY MORNING at

CORKETT'S
SHUEY'S
MISENER'S
McCUISTON'S—

BAKED BY

American Bakery

We do not Give Trading Stamps

Buy your groceries of
us, we can save you from
five to ten per cent. Trade
where your DOLLAR
goes the farthest.

L. B. MISENER
CASH GROCERY.

WHOLESALE AND RETAIL.

TELEPHONE.

Bend, Oregon.

FREE BUS
to and from depot.

The Only Modern Stone
Hotel in Bend.

Hotel Wright

(Successor to the New Taggart Hotel.)
MRS. NELLIE WRIGHT, Prop.

Steam Heat—Hot and Cold Water in Every Room.

Electric Lights
LARGE SAMPLE ROOM
Splendidly Equipped

American Plan \$1.50 to \$2.50 Per Day

European Plan 75c to \$1.50 Per Day

\$53,000.00

BEING GIVEN
AWAY

to those who act as
the local representa-
tives of EVERYBODY'S
MAGAZINE and THE
DELINEATOR—all in
addition to liberal
commissions. Let us show you how you can

SECURE A SHARE

simply by forwarding the subscriptions of your friends and
neighbors and collecting the renewals of our present subscribers.
Try for THIS month's prizes. There are lots of prizes that can
be won only by persons living in towns same size as your own.
Write at once to the

BUTTERICK PUBLISHING COMPANY
BUTTERICK BUILDING, NEW YORK CITY