

Special Sale

E. PALE

The Tailor

IS compelled to leave the city on account of ill health and will sell all suitings **BELOW WHOLESALE** price.

These goods were purchased for the best trade and are for ladies' and gentlemen's suits and one-piece dresses.

Call at Once to Secure
a Great Bargain

E. PALE & CO.

379 North Front St. Marshfield, Oregon

Y. M. C. A. TO FORBID SONGS

'Everybody's Doin' It' and 'When I Get You Alone Tonight' Barred.

WASHINGTON, Dec. 31.—Members of the Young Men's Christian Association and visitors to the association building will please refrain from the playing or singing of music of the following kind in or about the association: 'Hitchy-koo,' 'Row, Row, Row,' 'Everybody's Doin' It' and 'When I Get You Alone Tonight.'

"Such songs are not at all in keeping with the ideals of the association."

This notice signed by W. M. Knolls Cooper, general secretary, appeared on the bulletin boards in the Y. M. C. A. building.

"For many years past," said Cooper, "I have noticed a steady lowering in the moral tone of the average popular song. Formerly street music was derived from the operas of Gilbert and Sullivan but nowadays, they seem to come mostly from the burlesque stage. Twenty-five years ago many popular songs possessed considerable merit; today they are unspeakable."

The Star Transfer and Storage Co.

is prepared to do all kinds of hauling on short notice. We meet all trains and boats and we also have the latest style Reynolds Piano Mover. We guarantee our work.

L. H. Heisner, Prop.
Phones 98-R, 126-J

Fisher Auto Service

Wm. Fisher, Proprietor.
Phone orders to Hillyer's Cigar Stand, Phone 18-J. After 11 p. m. phone 5-J. Night phone 181-R. Marshfield, Oregon.

A modern Brick building, Electric Light, Steam Heat, Elegantly Furnished Rooms with Hot and Cold Water.

HOTEL COOS
C. A. Metlin, Prop.
Rates: 50 cents a day and upwards
Cor. Broadway and Market



The Sign of
Good Candy
Always

WHEN YOU WANT A MESSENGER BOY—Something sent at or delivered
PHONE 126-L
and we'll do it. Charges reasonable.
CHAS GRANBY.

Chalmer's Auto Service

J. M. Dodge, Driver.
Stand at Palace Restaurant.
Phones, 5-J or 5-L, day and night.
Marshfield, Oregon

Barnard & Langworthy

See our window display of
WOOD ELECTRIC FIXTURES
LEADED ART GLASS DOMES
PORTABLE STAND LAMPS
PHONE 184-R.

Unique Pantatorium

THE MODERN DYERS, CLEANERS, PRESSERS and HAT RENOVATORS
Agent for Edward H. Strauss & Co., Fine Tailoring. Let us make your next suit.
255 CENTRAL. Phone 250-X

You Auto Call Footie

PHONE 144-J NIGHT AND DAY
Stand front of Lloyd Hotel
TWO NEW CARS
After 11 P. M. Phone 5-J.
Residence Phone 8-J.
Will Make Trips to Coquille.

Pictures & Framing Walker Studio

Have That Roof Fixed
NOW
See **CORTHELL**
PHONE 3121

WANTED!!!
CARPETS UPHOLSTERING AND PIANOS TO CLEAN, by the Pneumatic Cleaning Company. Orders for work taken at
GOING & HARVEY,
Phone 196

Clearance Sale
BIG CUT IN PRICES—
Ladies' Children's and Men's SHOES.
All new stock. Up-to-date Lasts.
The Electric Shoe Shop

Simple Explanation of Electricity

Whenever you ask an electrical engineer a question he seizes a pad and draws a picture. This is getting the cart before the horse.

The picture is a graphic representation of an idea. You have to comprehend the idea before you can grasp the significance of the picture.

Electricity is a far more definite science than that of steam power. The public has learned from constant repetition that about 90 per cent of the energy liberated by burning coal to run a steam engine is wasted. In an electrical machine the waste is far less and the amount of energy that is generated can be measured far more accurately.

Electric generators are machines to transform mechanical power into electrical power. In other words, they generate electric current when driven by mechanical power. They are run by steam engines, turbines, gas engines or some other form of mechanical power called "prime movers." The generator is constructed to transform the amount of mechanical power that the prime mover running it supplies. A generator run by a ten horse power engine, for instance, will transform ten horse power of energy, less a small percentage (about ten per cent) lost in the process. Electrical engineers don't usually say that a generator transforms ten horse power. Their measure of energy (or power) is the kilowatt, which is equal to one and a third horse power. So they say the generator transforms seven and a half kilowatts, which is the equivalent of ten horse power. Why should this change in nomenclature be any more confusing than to say that one inch is equal to two and a half centimeters?

Mention the action of electric current to a neophyte, and he immediately assumes a look of blank perplexity. Yet the fundamental facts about electric current are extremely simple. An electric current will not move unless it can move in a complete circuit, and get back where it came from. This is why it is safer for a man handling an electric current to work with one hand behind his back. He is then not likely to touch it in two places and thus complete a circuit through himself. Electric current may be said to have exactly the same sort of intelligence as a child playing puss-in-the-corner. The child will not leave the corner it occupies until it sees a corner free for it to go to. By likening the electric circuit to the piping system which leads the water to a basin and away from it to the sewer, it is possible to grasp this idea by noting the difference in the action of electric current and of the water. In the case of electricity, if you open the faucet the electricity will flow only if the discharge pipe is free all the way, and thus it has the power of finding this out instantly even if the obstruction in the discharge pipe is very far away. In other words, an electric current acts physically like one continuous piece of material, such as a hoop or an endless chain, one part of which will not move unless the whole of it moves. You cannot move one part of a hoop without revolving the whole hoop. You cannot move one part of an endless chain without moving the whole chain. In telegraphing from New York to Chicago the action of electric current is precisely similar to what it would be if you had a long chain reaching this distance and back, and if you pulled on it intermittently to make the dots and dashes. Only instead of pulling on the chain you break and close the electric circuit. This can be done at any point along the line, and the effect is apparent at any other place or at any number of places simultaneously. Sometimes the return part of the chain is by a second electric wire, and sometimes the return is made through the earth. When the circuit is broken at any point on the line the current stops everywhere, to start again when the break is closed. But how does the current in New York know that the circuit is broken in Chicago? This brings us to one of the really remarkable facts about electric current. It travels at the rate of 200,000 miles a second, and can, so to speak, "see ahead" this distance which is longer than any electrical circuit that has ever been used. So an electric current stops in less than a second if the circuit is broken anywhere within 200,000

miles of where the current is generated.

We have said that an electric generator of ten horse power capacity run by a ten horse power engine will transform ten horse power of mechanical energy into ten horse power, or seven and a half kilowatts, of electricity with practically no loss. This is true of a direct current generator, but in an alternating current generator larger carrying capacity is required for the following reason. Electric power is the product of the volume of current (amperes) and the pressure at which it flows (volts) just as the energy with which water flows out of a pipe is the result of the volume of water and the pressure at which it is flowing. The product of the amperes and volts is called watts. When the product is 1000 (100 volts x 10 amperes, or 10 volts x 100 amperes, for instance) it is called one kilowatt. In an alternating current machine the amperes and volts reverse their direction with marvellous rapidity, but not always at the same instant. The amperes may arrive at a motor which is being run by the generator slightly before the volts or pressure. In that case the amperes with no voltage behind them are idle and do not produce any power. But the generator, the motors and the transmission lines, in fact all parts of the system, have to be made large enough to carry all of the amperes, whether they are accompanied by volts and therefore produce power or not. The idea can be best expressed by a simile. Imagine a man in business on borrowed capital, who expects to make a certain percentage a year on the commodity he sells providing he sells it promptly. Supposing he cannot sell it promptly he has to pay interest on the capital invested in his stock. This cuts down his net profits. The failure of the pressure (volts) to reach the motor at the same time as the volume of current (amperes) cuts down the amount of power delivered by the machine in precisely the same way as the slow sales cut down the profits of the business man, if the volts come a little bit later or earlier than the amperes so that 20 per cent of the amperes are not accompanied by volts this reduction is 20 per cent and the machine, or system, is said to have only 80 per cent power factor. Therefore a generator with 80 per cent power factor would have to be big enough to transmit the current corresponding to 12 1-2 horse power in order to transform all the power from a ten horse power engine. Twenty per cent of the 12 1-2 horse power capacity, or 12 1-2 horse power, is idle capacity. The remaining ten horse power are transformed, and the generator, by being built large enough to transmit 12 1-2 horse power, succeeds in transmitting the full output of the engine running it—ten horse power.

WOMAN PROPOSES.

(Believing in a thorough reform, a certain suffragette club offers the following set of Ten Commandments with which all husbands are requested to conform:)

1. Thou shalt love thy wife with all thy heart, with all thy mind and with all thy strength.
2. Thou shalt have no idols before her—neither aeroplanes, clubs nor newspapers.
3. Thou shalt not steal softly into the house in the wee sma' hours of the night.
5. Remember thy hose, to keep them whole.
6. Thou shalt not lie in bed until breakfast.
7. Thou shalt not kill thy wife's affections by making harsh remarks about her pet presidential candidates.
8. Thou shalt not bear false witness against thy neighbors, unless thy wife should ask: "Heavens! Am I as fat as she is?"
9. Love thy neighbor as thyself, but love thy wife more than either.
10. Honor thy father-in-law and thy mother-in-law that thy days may be long.

NOTICE.

Commencing Tuesday, December 24, the Marshfield-Empire auto will leave Marshfield at 9:30 a. m. and 4:00 p. m. for Empire.

Times' Want Ads bring results.

Marshfield Business College

Day and Night School

THE SIGNS OF THE TIMES.

Lack of business knowledge was always a grievous handicap—even before business was King; before it became the biggest game men play, as it is today. Long tedious apprenticeships, at little or no pay formerly overcame handicaps. Apprenticeships are no more—not in business—and the inexperience which was once a handicap, is now a positive bar, that HOPELESSLY BLOCKS even your beginning, but more decidedly still your advancement.

A man unfamiliar with business is undesirable as an employe, useless as a manager, and a serious problem to those who would befriend him.

A sound, modern training, which will enable you to give a good account of yourself, right at the start, in a position of trust and responsibility, is what is now offered you. Explanatory literature will soon be on the ground. For particulars write the college.

Temporary Headquarters, Hotel Chandler.

The
First National Bank
Of Coos Bay
Announces
It's 1913 Calendar
Is Ready for Distribution
Among Its Customers

STATEMENT OF CONDITION
of
FLANAGAN & BENNETT BANK
MARSHFIELD, OREGON
ESTABLISHED 1889.
At the close of business, November 26, 1912.

RESOURCES.	
Loans and Discounts.....	\$483,557.13
Banking House	59,900.00
Cash and Sight Exchange....	263,899.96
Total	\$797,457.09
LIABILITIES.	
Capital Stock paid in.....	\$ 50,000.00
Surplus and Undivided Profits	64,989.75
Deposits	682,467.34
Total	\$797,457.09

C. A. Smith Lumber & Mfg. Co.
RETAIL DEPARTMENT
LUMBER, LATH, SHINGLES, MOULDINGS, SASH AND DOORS,
ROOFING PAPER, ETC.
CUT THE FUEL BILL IN TWO BY USING OUR WOOD.
PHONE 190. 182 SOUTH BROADWAY

The Times Does Job Printing

HOUSECLEANING AND WINDOW CLEANING
We make specialty of this work and also office janitor work and guarantee satisfaction. Charges reasonable.
C. M. LETTS.
Orders may be sent to phone 298 or left at the "Busy Corner."

FOR A GOOD WATCH OR FINE JEWELRY
C. C. BARKER
JEWELER
Watch and Jewelry Repairing.
3 Front St., Marshfield.

New and Second Hand Furniture
sold on the installment plan.
BARRINGTON, DOYLE & CO.,
362 Front St.
Phone 840-L Marshfield, Or.

J. SCAIFE & A. H. HODGINS
Marshfield Paint & Decorating Co.
Furnished. Phone 14-J. Oregon Estimates
MARSHFIELD.

REAL ESTATE, INSURANCE AND RENTALS
Some fine bargains in Real Estate. Houses and rooms for rent.
AUG. FRIZEEN.
68 Central Avenue.

R. J. MONTGOMERY
Real Estate and Insurance
244 North Front Street.

LOGGERS OF COOS OR ANY OTHER COUNTY

Coos Bay Feather-Weight Loggers' Shoes

Longer than any heavy shoe. Light and watertight and is the best shoe of its kind in America. Guaranteed by the maker.
AUGUST OLESON.
5 Broadway So. Marshfield, Or.

BUILDING AND REPAIR WORK.
House Moving and Grading.
We are prepared to do this work the day or contract and guarantee satisfaction. Let us figure with you.
G. S. FLOYD & CO.,
Phone 316-J. Marshfield, Ore.