would have cost him at least $\$ 5$ in cash, five hours of hard traveling, at his own risk of person and team, and the loss of three hours for business, and much discomfort and exposure of health.

With such facts the fares are over one hundred per cent. and the business opportunities are over one hundred per cent. more, and the personal insurance and comfort probably over one hundred per cent. more in favor of the railroads instead of against them.

THE GAIN HY RAILROADS.
This 300 per cent. gain in travel is a factor, which can be proved on any ordinary line. The railroad, as a rule, improves traveling facilities, safety and business power fully three hundred per cont. This per cent, can be measured up still higher by the opportunity to meet correspondents at stations, do business and move on by the same train or the next and repent the operation for hundreds and even thousands of miles and return home from such long trips in a few days, which cost half as mary months and twice as much money at a loss of three-fourths of the business power.

These figures are below the facts, as applied to the era of no railroads, compared with the present growing advantages of them in the upper basih of the Columbia especially in the winter.

## FREIGHTS.

The charge is made that freight rates are up to the old charges by teams, at least in the recent advances on the N . P. R. R. lines, and that the gain, if any, is only in time and safety of carriage.

It would be well for any man, who knows how, to compare the former schedules with the present and show the public the exact figures and the exact loss or gain under the three modes, the pack train, the mule train and the railroad train.

Grave charges ought to be sustained by figures and facts. It is for the interest of every town, family and person to know how the case stands, and it is of the same interest to the railroad companies who have come among us with their vast capital, and also to the mule trains and old pack trains, if they are to be recalled by the communities who begin to bewail their departure.
EXPRCTATION OF SFORM AND COLD.
The law of climate is said to be unknown. "Yes cannof tell," said an
experienced captain on one of the Columbia river steamers, "what the weather will be any winter." Last winter it was cold carly and long. The ice stopped navigation several weeks, even months. Snow covered the mountains and spread over the hills. Herds and flocks died for the want of food and water in the northern half of Eastern Oregon and in all of Eastern Washington. But there is a law of climate fixed and sure as the tide, and it applies to our Northwest coast, and to the interior. The air currents and cold or warm waves, and visible and invisible conditions of the vapor are all subject to the aerial law, as the river and ocean currents are subject to the law of attraction, rarefaction and revolution. It is true that the entire details of the law are unknown, yet we know enough to forecast seed time and harvest, cold and heat, with certainty and regularity which successive years attest. More accurate and wider fields of observation, will enable physicists to collate more facts to compare with those already known and to eluce new factors, which are involved in the universal laws of our climate and especially those which apply to the upper Columbia Basin.

It is always true when a room is heated that cold currents press in and condense vapors.
It is sure that cold mountain air currents will flow into the warmed basin of the upper Columbia and meet the ocean currents that flow in that direction. Changes will ensue quickly. A few hours will turn a warm day into a sharply cold night. Vapons invisible are apt, in spring, to be condensed suddenly into cloud burst and plough through the hills from top to bottom with a rush of torrents. The clear midday is quite sure in summer and autumn to shade off into a twilight haze and cloud which vanishes with the rising sun and repeats iteelf in variant forms in mild winters also. The beauty of this proces, which throws often a vail over the setting surs, and allows only the passage of its red and least refracted rays, spreading a royal glory over the western sky, is unsurpassed in splendor, as it is brilliant with illustrations of abiding principles.
The railroad town of Sprague now contains 200 houses and more are being built as rapidly as the weather and

A BERDS'EVE VIEW OF PORTLAND ON CHRISTMAS RYE.

The sun was fast descending toward the blue waves of the Pacific. A shower had just left pearls of rainbow tint, upon the green boughs of giant fir. The velvet carpet of green amiled agam, as if returning thanks for the blessings of rain. The sun peeped out among the flecey clouds, that passed like great flakes of down, between heaven and earth, and dropped his brightest rays on the beautiful landscape below. Standing on a spot 500 feet above the surrounding plain, I gazed upon a seene which would have made a landscape painter wild with delight. The time was Christmas Eve, the latitude $4^{\circ}{ }^{\circ}$ north, yet the air was balmy as spring, and in my heart, with a feeling of perfect application, 1 hummed the old tune, "December's as pleasant as May." For the benefft of the dwellers on the plain, to whom the grandeur of mountain scenery is unknown, who look upon a "green Christmas " as an omen of ill, and who listen, at such times, to the tinkle of the sleigh bell, and shiver in the chilly embrace of "old Boreas," I will attempt briefly to outline the pieture before me. A range of hills about 800 feet high, describing the arc of a circle, bounds the view to the west and is covered by a heavy growth of fir and vine-maple. At some places the descent is precipitous, and the cove formed by this range of hills, slopes from thence gradually to the bank of the Willamette river. In this cove, and along the west shore of the river, stands the city of Portland, with its beautiful streets bordered by mansions where many a prosperous family revels in luxury and wealth. Many an older city with ten times its population might well feel jealous of the giant strides toward greatness, now being made by this queen of the great Northwest. Though she is allowed to claim only at,000 souls, the eyes of the world are upon her, and her roal to fame is already paved. No city is the Union is spending proportionately one fifth as much money in beautifying and improving her streets and other facillties for business as Portand. The Willamette sweepa in a broad curve round to the east and north to afford this mistress moos in proportion to her I prospective demand, and beare upon its |ripplingsurface, ahipn from every nations.

