King mine is rich in gold, silver, copper, and lead, and has been prospectored to the depth of 350 feet, with extensive drifts at each 100-foot level, and everywhere showing abundance of high grade ore, and is unquestionably the greatest discovery in Oregon up to date. Many other veins have been found in the vicinity showing good prospects; and the surface now being the original apex, a prospect on the surface indicates a paying vein deeper down, and this field is certainly now worth the capitalist's investigation, and a place of probable great gain by a reasonable money venture. The fact is, the stock men with their herds and flocks have trod over this ground for the last thirty years, little suspecting the wealth that lay beneath. Further east and south we have the Ochoco mines where gold was first discovered 20 years ago. The writer has no way of estimating the amount of placer gold that has been taken from these mines in the time past. In more recent years exploration has tended to the development of vein or lode mines and many thousands of dollars have been spent in tunneling and sinking shafts which have led to the uncovering of large bodies of low grade ore as well as some ore of high grade. Here is a proposition that only waits cheaper means of transportation to constitute to some man or body of men an inescapable source of revenue. In this formation there is no great amount of quartz, but great beds of porphyry carry lead, silver and gold. These mines are surrounded with one of the best bodies of timber known to Eastern Oregon, adding to the opportunity of successful working of the mine. South of this point, on the north side of Lookout mountains, recent discoveries indicate another body of ore carrying precious metals to some extent, but at this date the development work has not been sufficient to demonstrate that the prospect constitutes a mine. Near the eastern boundary of this county, upon the headwaters of Beaver creek, a tributary of Crooked river, are many hills made up of a great gravel wash. No boulders being larger than a man's head, and the boulders and gravel are either quartz or quartzite, and are hard and smoothly worn, showing that they have been subject to great erosion. All of this gravel carries some gold and perhaps would pay for washing with an abundance of water and a sufficient dump. It is evident that the formation from which they were detached was of the primitive rocks and were mineral bearing. In places these gravel beds seem to have been heaved up from the bed of a sea or ocean which, judging from the character of the fossil shells lifted up, apparently coming under the gravel in the first deposit of silt, which is now formed into a secondary slate deposit, said by professors to have been co-incident with the formation of the chalk bluffs of England and France.

FARM RESIDENCE OF S. R. BLAYTON

Who will find the bed rock from which the gravel at the head of Beaver creek had its origin? When he does he will find a second Klondike. Along the source of Crooked river are many dikes differing in character and perhaps differing in origin. Many of the dikes show the presence of gold and silver in small quantities, but now deemed not sufficient to constitute a paying mine, so far as now explored.

To the south of Crooked river is the Bear creek and Powell buttes, which in connection with Grizzly butte, Gray butte, and Baldwin hills, evidently once constituted a low range of mountains or hills that are very ancient in their origin and are porphyritic in character. Their ancient character is proven by observing the butting against and overlap of the lava against their base. One of the reasons why the richness of the county in mineral resources has not been discovered long ere this is that the nature of the ore is not common to other parts of the state, and the average prospector, not being familiar with its character, has usually been looking for something different and did not realize the amount of wealth over which he walked. That the surface of the earth in this county has been torn and rent by volcanic action is evident to the eye by the vast rap and upheaval shown in places, and the over layer of volcanic ash and lava in others. Near Hay creek we find a large tract of country where the surface rocks are slate and in which are found fossil leaves, and under which we might reasonably look for stone coal and perhaps coal oil. Directly upon the head of Beaver occurs blue lime stone in ample quantities to supply the wants of the people of this county, for all time to come, when transportation is cheapened and demand is sufficient to warrant working. Near this place some coal has been found, but the locality was not explored sufficient to demonstrate quality or quantity. In many places between Hay creek and Trout creek opals have been found in abundance that were very beautiful, but none as yet that will stand the operation of polishing, but are inclined to crumble and stack after exposure to the air for some time. Moss azate is found in places in abundance and probably would possess some commercial value by careful selection of the specimens for the jeweler's use. Upon the head of the Deschutes are found great blocks of pumice stone, like great masses of honeycomb, of even texture and fine grit suitable for polishing purposes for either wood or ivory. In the southeastern portion of this county are many indications of great borax beds. The mining probabilities of which I have written, will at no distant day constitute a part of the riches of this, one of the most wonderful countries comparatively untouched, south of the frozen regions of the north.

W. M. C. WILLIAMS

FARMING AND STOCKRAISING

To write up the farming industry of Crook county, and do it justice, at this particular time, is a somewhat difficult task. So far in our history we have simply lived through the experimental stage in the matter of farming, at least in the production of cereals. Large portions of Crook county are now being crossed by the line—pointing from the old to the new era in the matter of raising grain. Take, for instance, what is known as the Haystack county. It has been but a few years since it was known that even the choice lands of that section of country would actually produce wheat, oats and barley. Gradually year by year, the experiment has been broadened until the past season that entire expanse of rolling hills and valleys where a few short seasons ago there roamed vast herds of cattle, horses and sheep, were striped and checked all over with yellow fields of grain. That particular section of Crook county is already across the line. It is essentially a farming community even now. It is ready and waiting for a railroad. The slow toiling gang plow the even ruts of the traction engine as it drags its cumbersome self and separator from farm to farm, and the men have taken the place of the once rough and proud vaquero. The unskilled hired man has become a hired shepherd, noting the sure endowed-