PROSPECTING FOR GOLD AND SILVER

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Prospecting for gold and silver by Arthur Lakes

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ARTHUR LAKES

PROSPECTING FOR GOLD AND SILVER



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FOR

GOLD AND SILVER.

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PREFACE.

In preparing this little work the author has felt the difficulty which arises in a theoretical dissertation on so eminently practical a subject as prospecting. It seems like giving rules and prescriptions for hunting or fishing or any other natural or practical pursuit. Though theory and practice are not at variance when happily combined, yet either without the other proves very unsatisfactory. Thus the reader of this book, should be start out armed only with its theory, will find himself for some time pretty much "at sea" when he comes to actual practice in the field. As, however, he gradually obtains some practical experience, he may find this little work of use to him. So, also, the seasoned prospector, who has hitherto trusted to luck, keenness of observation, intuition and experience, may find himself in the future much better equipped by acquiring a little of the theory.

Whilst we have endeavored to give the prospector all assistance in our power, as to the best means of educating himself, describing his outfit, etc., we have devoted special attention to the description of such geological and other phenomena as he is likely to meet with in connection with his work, so that he may have an intelligent idea of them when

he encounters them,

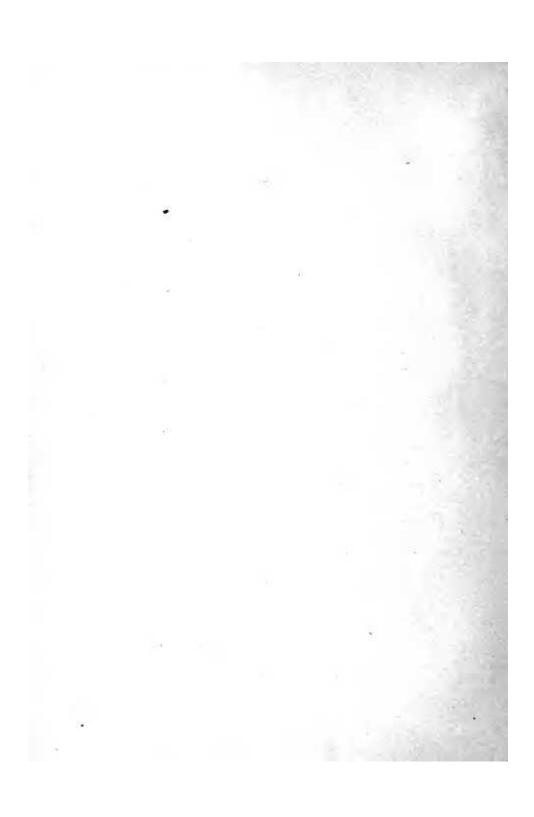
We have selected just as much material as we think would be most interesting and useful to him, saving him the time and trouble of wading through heavy tomes and laboriously picking out from a vast amount of, for his purpose, super-

fluous matter, that which he will most require.

The work is intended to be a popular one, addressed to the average student, prospector and miner and to the general public. The illustrations are largely drawn by the author from Colorado mines and Rocky Mountain subjects which are most familiar to him.

> ARTHUR LAKES, State School of Mines, Golden City, Colorado.

JANUARY 1, 1895.



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PROSPECTING FOR GOLD AND SILVER.

CHAPTER I.

ON PROSPECTING-PREPARATION AND OUTFIT FOR WORK,

The regular prospector, as a rule, has at some time of his checquered career had some actual experience in the mines themselves, from which he has learned by observation, the appearance of different ores, their different values, how the veins appear on the surface, how to open a vein, and the uses of pick, shovel, and blasting powder. In a word he is a miner, who has become too restless to stick to steady work, and so follows the more uncertain and precarious livelihood of seeking for new and undiscovered veins, many of which even in an old mining district may yet be discovered covered up by brush or debris, whilst a new district offers a most enticing field. These mineral veins or ledges, may make him in a moment a comparatively rich man, and if he finds them, they will cost him nothing, only a simple compliance with the inexpensive regulations of the law. So the life of a prospector offers many attractions to one who is restless and loves to roam and loves to find something new and is not afraid of considerable hardship. To save a vast amount of time and labor, he should acquire knowledge. Thus, for instance, if he were prospecting for coal he would be wasting his time in hunting for it in granite, or if he was hunting for the precious metals, he would lose time in looking for them among the unaltered sedimentary strata of the prairie. This is merely for example, but an infinite variety of knowledge is necessary for him in his vocation, besides even that of the simpler elements of geology, such as the knowledge of different kinds of minerals, and their value, the kind of places and peculiar rocks they are associated with, their appearance on the surface, etc., etc.