APPENDIX.

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BLASTING.

"When a sufficient number of holes of the proper inclination have been drilled to give a "good throw," the cavities are charged with giant powder or nitro-glycerine, and a waruing signal given, hearing which all hands quit work and seek shelter until the blast has taken place. These blasts are usually made four times a day-at ten o clock and at one, at three and at siv. When the blast is over, the other workmen set about removing the ore, and also the other rock which may happen to be disengaged with it. Some "throws" loosen larger quantities of ore than others, as some mines are more favorably situated or easier worked than others. New Work mines are more havorably sumated or easter worked than others. New York mine, situated at lshpening, has a vein sixty-five or sevenity feet in width, the opening being 500 feet superficial in length, and down at the present time some sixty feet, dipping at an angle of about 30 degrees. Re-cently, at a single blast, 1,075 pounds of giant powder being used, over 4,000 tons (8,000,000 pounds) of ore was thrown from this mine

DIFFERENCE IN VEINS.

" The hematite veins are easier worked than the specular or the magretic. At Negamee, upon some of the same locations are found both classes of ores. It may be said, however, that the hematite mines have not been so energetically worked as those containing ores of the harder varieties. EXPENSES OF A MINE.

"A considerable expenditure is attached to the working of a mine, so that if valuable ore is found upon a side hill, awaiting the pick and shovel of the miner, he cannot attack it without first making extensive preparaions. In the first place dwellings for workmen having extensive provided in the first place dwellings for workmen have to be crected, which is no slight task when the number reaches, as it does in most cases, fifty or more, several locations have a hundred. Then roads are to be cut, and switches and side tracks made, platforms and sponts for loading cars built, and repair shops put up. In places remote, stores have to be supplied, and goods of all descriptions kept for the use of the laborers and their families. It frequently happens that months are consumed in this preliminary labor.

THE MINER'S HOMES.

The dwellings of the workmen are either frame or log houses. If the former, sometimes painted, but in all cases made exceedingly comfortable. There is a certain sameness in the structures, and the stranger notes the absence of fences and inclosures, and the lack of gardens that he is accustomed to see attached to dwellings of like character "below." Most mines have school-houses and teachers upon their locations, though not all of them are thus provided. In such cases of course the reason is the neglect of the parents themselves, who are quite as well satisfied to have their boys earn wages as to lay up a store of " book learning."

DOCTORS AND LAWYERS.

"A physician is an indispensable attache of every mine, hisservices being paid for by retaining from each single employe's wages seventy-five cents monthly, and from each married one \$1.25. Mining accidents, however, are not so numerous as one might naturally suppose. Preachers are not so common, but occasionally one deems it his duty to visit the mining locations and attend to their spiritual wants. There are lawyers, too, but few of them thrive in this region. Each mine is contiguous to the railroad, and thus communication is made easy; moreover, at each is a post-office and a telegraph station. As for justices of the peace and constables, a distribution of the offices is made at each election—two or three, or more mines comprising a township, and law and order reigns as well as in any other well regulated community." We must beg to differ from "Usef" in regard to the hotels in which

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and the rain, the drill attacks tho er work in gangs hom. Perching ce, upon the side no great length, lwart colleagues.