e the inden of a d by means of raknews, be will in mining are h explorationa nber is first cut jnmmediately at he cane, nothing and plck and , and More frehay the intervendeterinines the deterinines the
the vein on the the vein on the
as to rcsenble
ame principlea parwage is which bly, to openinge arest the coulfigu rerally speaking, ry lottons of the
rpendicular, and I is nupported by les iself in the Hiered to remain ud it. In sume large deponits of large deposits of
:R, into which the
driven into the a vast heap con1 through ahoot throngh shoots , of course it beabys hornes and ticable point will
re used inclined are used inclined
licular, traversed licular, traversed
sumly devised to from the track nd for puroping, into the bottom.
and the rain, the drill attacks the drill attacks tho work in gangs hom. Perching ce, upon the side
no great length, Ifart colleagues.

Blayting.
"When a nuflicient number of holea of the proper inclination loave beet drilled wgive a "good throw," the cavities are charged with giant powiler or nitro-glycerine, and a waroing wignal given, hearing which all haude quit work and seek ahelter mentil the blast has taken phace. Theme blanta are uabally uade four timen a day-at ten oclock and at one, at three and at niv. Whets the blast is over, the other workmen met sobout removius the ore, and alno the other rock which may happen to be dimengnged with It. Some "throws" toowen larger quantitien of ore than others, as mone minea nre more favorably milnated or easier worked than others, New York mine, situated at Ishpeming, has a vein sixty-five or neventy feet in width, the opening being 500 feet noperticial in length, and down at the prement time mome sixty feet, dipping at an angle of about 30 degreer. Recentlv, at a single blant, 1,075 pronade of giant powder being uned, over 4,000 tons $(8,000,000$ gounds) of ore was thrown ifotm thim uine

> dKwercnce in vetnh.
"The bematite veina are easier worked than the apecular or the mag. retic. At Nugannee, upon mone of the mame locationa are fonud both classes of ores. It may be naid, however, that the homatite inines have not leen so energetically worlsed an thowe containing ores of the harder varietien. Expenses of A MINE.
"A considerable expenditure is attached to the working of a raine, so that if valuable ore im fonad nomin a mide hill, awaiting the pick and nhovel of the miner, he cannot attank it without firat making extensive preparaions. In the firnt place dwellings for workmen have to be erected, which fions. In the firnt place iwellings for worknen have to be erected, which is no alight tank when the monber reachen, as it doen in moat canem, fifty or
more, tevoral incationa have a hundred. Then roadn are to be cut, and switchen and side trsek made, platformand nowta for loading can built and repair mhops put ap. In places remote, stores have to be supplied and goods of all demeriptions kept for the ume of the haborem and their famihes. It frequently happena that montha are consumed in this prelim. ninary labor.

THE MINER'S HOMES.
Thu dwellings of the workmen are either frame or !óg housea. If the former, sumetimes painted, but in all cases wade exccedingly comfortable. There is a certain sameness in the ntructures, and the atranger notes the almence of fencen and inclosures, and the lack of gardens that he is нecurtowed to ree attached to dwellingn of like character " velow." Mont mine have mehool-housen and teachera upon their locations, though not all of them are thus provided. In mach cases of counce the reason in the neglect of the parents themselvea, who sre quite as well satislied to have their boys earn wages as to lay up a store of "book learning."

## DOCTOHS AND LAWYERS

"A physician is an indispentable attache of every mine, hisservices being paid for by retaining from each aingle employe's wages geventy-five centa monthly, and from each married one $\$ 1.25$. Mining accidents, however, a-e not so numerous as one might naturally muppose. Preachers are not go common, but occasionally one deems it his duty to visif the mining locations and attend to their npiritual wants. There are lawyers, too, but few of them thrive in this region. Each mine in contiguous to the railroad, and thus communication in made easy; moreover, at each is a postrosf, and thus communication a telegraph atation. As for juatices of the peace and constablew offee and a telegraph atation. As for juatices of the peace and constablen mines comprising a township, and law and order reigns as well an in any other well regulated commanity."

We mist beg to differ from "Usef" in regard to the hotela in which

