## THE ONTARIO WORKMAN

## for his companiong tho Black Princo and his barone", "Thack Prince and his barons 1 " ox

 olaimed Don Podro, turuing palo; but whatmattora a ater all. AmI under tutelage I not be free whon I have paid for their ser vices?
"Oh, madam," said Rachol, roproachfnlly, "I thought the past had been forgoten be
"Aixa nover forgets," returned the Morisca "a Moorish woman revenges herself, bcautiful Rachel, overcome with fear a,
ber face in her lunde and wept.
"And thou, Don Pod
And thon, Don Pedro," continued Aixa, every time we met should be fignalised by some sall event? Thou seest tunt Itsnow how to keep ny worl. The house of the hangman
of Seville is henceforth the residence of the Jowes.
Notwithstanding all the courage of Don
Pedro, ho trembled at this infumous threat. "Wedro, hot dost thou mean?"
"The hangraan comes, in virtue of his privilege, to guard the door of the Morabethinto claim publicity Lor his vassal, that woman among thoso abandoned women who pay him tribute." "Mere

Mercy, mercy, madam !" exclaimed the Wrame tremtling as if under torture. Had
frater
Burdete Burdect stood over her with nu uplifted dag.
ger she would not havo trembled; sbe could have braved death, but shame !-the menace of the Morisca threw her into a delirium of agony. Forgetting all her pride, she dragged
herself on her knees to the foet of Aixa, re peating "Mercy, morcy, I am not guilty!" and supporting her, "do you forget that you are under my gateguarid
of Castile and Leon?"
"For that very reason shalt thon surrender Again did Don Pedro protest that ho wixald never leave the iide of Rachel, even should it compromise his crown, his honor, and his life;
bat so clearly did Aixa of evading the hangman's claim, that Rachel perceived at once the utter ruin that tbreatened her lover, and with the devotion of real
affection determined on becoming the sacrifice -she ingisted on being left to her
The king, who had not remined
to the force of Aixa's arguments, exclaimed "But if I abandon thee, my poor child, who then will protect thee?
one of Paloma, coming forwark, and ranging thembelves around poor Rachel. " You !" exclaimed Rachel, doubtingly, for he felt that resistance would be vain At this moment a load noise was heard from
outside, and the bronze gate of the Morabethin, Which Gil had taken the precaution to close after him, aced himealf before Rachel sword in king "Do you hear?" said the Morisca ! "Juan, the hangman, is impatient for the prey $I$ have promiscd him. To work, then, praggadociose,
for I am really curious to know how you can eacape from this holy place?
"And I, likewise," answered Perez, the miner, pointing to the door, "I am curious to
know how Sir Juan, the hangman, will penetrate to his new vasall?"
Aixa uttered a sbriek of rage as she turned and aaw a rampart of granite piled up before She cast horself like a furions ioness on this barrier, and while ehe tore her hands in fruit-
lecs efforts to remove it, the miner whispered less efforts to remove it, the miner whispered
gomo worls in the ear of the king; the countsomo worts in the ear of the king; tho
eanance of tue latter lighted up with joy. enance of the latier lighted up with joy.
Then they heard the blows of a hatchet on ed. "Xou were cuirious to know how the hang. man would enter," said the Morisca, insolently,
Rachel remained cold snd immovable as a Rachel remained cold and immovable as a
thatue, but tho king answered, "W We shall no more sea how he will enter than thou wilt see

At theso word, Ruy, the mower, advance and locking the Morisca in his long, bony
arms, wrapeed his cloaks around her head and arms, wrapped his cloak around ber head and
face: This feat was performed with such doxterity, that Aixat had not time to utter a ain gle cry, and while she struggled extricate herself,
Meanwhile, Pereaz, lodging his pickaxe in a large iron ring, raised a heavy stone, aud dis-
covered a ataircaso, which led down to the and
cient caverns of tho mosque.
The king drew Rachel down more dead than
alive, the brothers following, Perez haviug raken.
ring.
They
They were only just in time, for hardly had
the trap-door doscended when the do The trap-door doscended, when the door of the Morabethin gave way.
risca, saying to her, -
uno Noble the
Iight, we dame, when the heron is out of digh, we nay nately uuhood the hawk." Aixa soing herself alono with the move sprang sithit a furious bound to the boptom of
the Morabethin, ruving like a maniac. Having assured berself that Rachel and the kivg had escaped, and seoing hor revonge foiled at
the instant of fruition, sho fell fninting on the

Moanwhile the Black Prinoe, Burdett, and
the barons who accompanied them, raterod the open door, the hangman and his assistante having mado good thoir entry previouly; be hind wore the varlets and pages the squires
and servants, every ono boing desirous of wit nossing the termination of the drama.
All the loris who wore ready to judgo Don Tedro and the Jewess were silent and sorious. The Princo of Wales wna violently agitated;
and nlthough Burdett affectod to be calm, it was very easy to bee his calonness was onl
"ssumed.
"Sir," said tho Black Prince, stopping his that your wife had granted an intervies to
Don Pedro in the Morabethin. You ne to come and render you justice against him who plotted your dishonor. I have come.' The Black Prince then expressed his surprise and digpleasure at the presenco of the execu-
tioner, and when Burdctt explained the old Moorish hav, Edward, still reppugnant, answor ed that it better suited Saracens and idolater "The oustom does
"The custom does indeed come from the
Moors," "nswered Burdett, "but the Castilion have alko adouted it as the hest guarantce fo of King Mohamed, whom. chance has broongh ither as a witnes.
Tho King of Granada who had been waiting In tho grovo to take leavo of his daughter, hac Neige, who told him that Aixa waited ther for him.
"Sir K
"Sir King," azia Burdett to him, "every enclosure, does she not belong to the hang man?"
"It is an ancient and rigorous law, which the Knights of the West may ridiculc," an
swered Mohamed, " but in Andalusia and Af rica it is respected as holy. Our wives dread shame more than death. The king himsel nent of the hangman. If she be a maiden, and on the same day a man presents himsolf rash enough to marry her, and bind himeelf to pay punishment A and in advance, she may escape no chance of escape
Bardett now called to Juan, the hangman, do his duty
At that order, Juan placed his hand on the roll of parchment suspended from hia girdle, and beckoned his two assistants to follow him.
Burdett then advancd, aftor him the Black Prince, then the Moorish king, and the lord and barons.
The execetioner, on arriving in the middle the building, perceived a moman, closels parently dead on the floor; he lifted her up and partially recovering, she passed her band ver her brow; she saw the crowd that sur renembering only that Rachel had escaped ker snare, she made an effort to spring in pursuit of her rival.
The Late Comer brutally seized her arm and said, "I respect the veil in which a chaste and faithtul wite envelopes herself, but I tear of
that which serves to hide only her shame ; and be tore the veil into shreds. "Aiza!" anaimed, retreating in consteration.
"My daughter! !" exclaimed Mohnmed, in a vice trembing with surprise and griee, whil barons, not less astonished at this singular de. " S ent.
"So, sir," said tho Black Prince to Burdett, win evident diap leasure, "it seems to me that
you accuse jour wife and my noble all very lightly,"
"Sre,"
"Sire," stammerod Burdett, "hero is some yytery which I will not reat till I have found out." Then approaching the Morisca, he said,
in a decp voice, "Hast thon, peradventure been playing on my credulity, in order to avenge thyself for thy capture? It is a hazard ous game, I warn thee ; thou didst promise to
discover Rachel and her lover to me, and charge theo to keep thy word.
Aixa, pressing her forehead witi her hands regarded her master with haggard eyes; at
lengith she murmured, "Dasinel has disappear ed ; she has fled with Don Pedro: they have "It is falsa,
"Itis falase "" replied Burdett, "for I watched at the door of the Morabothin, and no one "They.
"They escaped, nevertheless, I tell the, refiumed ghe, in a hurried and broken voice,
"by what miraclo I know not. They wore here but now, pale and trembling before me;
Rachel tore herself from the arns of her lover $-I$ see her still-and knelt at my feet. They tried entreaty, despair, anger, to move me, but I was infexiblo ; alrcady had $I$ calledl on the one of the king's companions wrapped biscloak about me, and, when I got free, I sought in
vain for Don Pedro and Raclelel." " $\mathrm{OL}, \mathrm{I}$ am not the dupe of snch a fimsy tale,", said the Jate Comer, wringing the arm hamed, with his hand on his poignarl, was
 brutal mastor. It was Ruy, the newer.
"Pardon the poor girl" "aid he, "I oly guilty perison ; let mee alone bo punished." The despair of Aixa incrensed on recognising "By king's fostor brother as her defencer.
"By wht right demandest thou pard "By what right demandlost thou pardon for
thon, and how
in this place
"By what right," repented Ruy, with wellsigned embarrassment, "I cannot tell. Tor-
ure me if you will, but you shall not draw word from me which, slall criminato the "aughtor of Mohamed." "Tako caro, follow," said the Lato Comer "thou refugest to reveal the motive of thy in-
forview with the Morisa, thy very silence "erview with
(To be continued.)

## on the sense of pain

The sonse of pain in the mouth guarde the against improper food; and, in fact, every
patt of the body is usect part of the body is suscectibte of pain, wher or injury; but the heart, the brain and the
hngs, although the most vital organs, being lungs, although the most vital organs, being
protected from injury by the sensibility of the exterior parts of the body, a ligh sense of
pain in them is unnecesary, and they are al pain in them is unnecessary, and they are al
most insensible to $i$. The heart beats up wards of 4000 times in an hour ; and if tho pain from a a eisease ond for the sufferer, bu the pain from a disese of the orgne is seldom more than an uneasy senaation, and this more expecially a fiter violent exertion, being a cleck
to unecessary naction, and so for usful Sud
Sol ton death onary action, and so far useful. Sud heart ; not from the heart being suddonly dis cased, but from the disease cansing verylittle
pain, and being therefore unknown. The pain, and being thereioro unknown. The
brain, allhough the source of sensation, is it self insensible to pain; in surgical operations out the patient exhibiting any sign of pain. The lungs are highly susceptible of impurities in the air, and thus we are guarded against
tho inhalation of injurious gases ; their sensi bility during inflamation indicates the danger and compels the necessary care, but they are laost imsensible to pain Irom mutilistion oo less and an affliction. The lungs have been cat without causing pain, and during their
cay in consumption the pain is vory slight.

## believe in yourself

It is said that when John C. Calhoun was
Yale College he was ridiculed by his fellow students for his intense application to study. "ake the most of my time that I may acquit myself creditably when in Congress." Jaugh followed, when he exclaimed, "Do you
doubt it: I assure you if I were not conrinced of my ability to reach the Nationa capital within the next three years, I would
leave College this very day!" Let every young man thos have faith in himsolf, and earnestly tase hold of life, scorning all prop Let him believe, with Pestalozzi, that no man on God's earth is either willing or able to belp
and any other man. Let nim strivo to be a crearather than to borrow. Instead of wielding the rusty sword of valorous forefathers, let
him forge his own weapons, and conscious of the God in him and the Providence ovor him, lot him fight his own battles with his own tion, capital or friends, and declaring that "i he only had these, ho would be somebody,' lot him remember that as Horace Grés
said, he is looking through the wrong end of the telescope ; that if he only were somebody, he would speedily have all the boons whose
absence he is bewailing. Instead of being one of the foiled potentialities, of which the world is so full-one of the subjunctive heroes, who
always might, could, would or should, do great things, but whose not doing great things tho imperative mood, and do that of which his talents are indicative. This lesson of self-relionce once learned and acted on, and overy
man will discover within himself, under God, the elements and capacities of usefulness and

THE COLORS OF THE CHAMELISON.
This animal experiences very frequent modi-
fications of color in the course of a single day. fications of color in the course of a single day.
From Aristotle, who attributed these cbanges From Aristotle, who attributed these cbanges
to a swelling of tho skin, and Theophrastus, who assigned fear as their canse, to Wallis. nieri, who supposes them to result from the
movement of humors toward the surface of the animal's body, the most different opinions Edwards expresser the subject. Milne the successive inequalitics in the proportion of the two substances, ono yellowish and the ile-inequalities due to the skange in volume of the very Hattened cells that contain these substances. Bruck, renewing these researches,
proves that the ellameleon's colors follow from proves that the elanmeleon's colors follow from
the manifold difusion of solar light in the the manifold difusion of solar light in the
colored cells-that is to say, from the production of the samo phenomenon remarked in
suap , bulhbles, and all very thin plates or $b$ -
bres, to sunlight aunong sunnight among the yellow and vinlet, sub-
stanees distributed very curiously midor its wrimbled skin. It passes from orange to yel-
low, tron green to blue, through a series of
wavering and mint wavering and rainbow-like shades, deternined
by the state of tho lightest radiation. Dark-
doliciate marble tints ; tho sun turne it dark.
A part of the skin luvised or mbbed reme black, without growing white in the dark. Bruck satifified himself, moreover, that tem. peralure does not affect these phenomona:
We take on "Light and Life," tranalated from the
French of Fernand Popillon, and publishod in Yrench of Fernand Popillon, and publishod in
the Popular Science Alonthly for January. The iridescont hues of fishes may bo explained in a eimilar was
wonders of minute workman-
In the twentieth year of Queen Elizabeth,
 Cass, all of which, together with a key, weighed but one grainoof gold. Ho also made
a chain of gold, consisting of forty. three links; a chain of gold, consisting of forty-three links;
and having fastened this to the before-menned lock and key, he put the chain about ase. All theese together , lock them all with and fea, weighed only ono grain kyd chaic Oswaldus Norrhingerus, who was more famous ven than Scaliot for his minute contrivances said to have made 1,600 dishes of turned vot so small, thin and aleander thatt all out hem were inoluded at onco in a cup turned oat of a peppercorn of the common size. Joderiful work with him to home, and showed it Topo Paul ., who saw and counted then were so small as to be bair of spectacles. Thes eyc. Johannes Ferrarius, a Jesuit, had in his pos wheels and all other military furiture, all hich he ordinary gize. An antist named Claudiu Gallus mado for Hypolytus d'Este, Cardinal of Ferrara, representations of sundry birds sitting on the tops of trees, which, by hydraulic ar trunkn and branches of trees, were mado to sing and clap their wings, but at tho sudden artifice they immediately became all mute and ailent.

## blast furnaces.

From the earliest times, as among the native smitha of Africa to-day, the blatt of a bellown
has been used in working iron to increase the supply of oxygen. The bast furnace is eap posed to have beca first used in Belgium, and to lave been introduced in England in 1558. Next came the ass of bituminous coal, nrged
with a blast of cold air. But it was not till 1829 that Neilson, an Englighman, conceived the idea of hcating the air of the blast, and carried it out on the Muirkirk furnaces. In 2
jear he obtained a patent for his process, and ound that he could from the same quantity of fuel make triree times as much iron. His
patent made him very rich; in one single case of infringement he reccived a checquef for damages for one hundred and fitty thousand pounds. In his method, hnwever, he used an 1837 the idea of heating the air for the blast by the guses generated in tho process was iirst
practically introduced by M. Faber Dufour at Wasseralingen in the kingdom of Wurtem

In this country, charcoal mas at first used univerally for smelting iron, anthracite coal
being coosidered unfit for the purpose. In 1820 an unyuccessiful W. Geisenheimer, of Schuylkill, obtained a cite, cite, and in 1833 produced the frrst iron mado
with this process. In 1841, c. E. Detmond adapted the consumption of the gases pro-
duced by the smelting to the use of antaraate ; and since it has become quite general, and has causod an almost incalculable saving
to the community in the price of iron. $-L i p$. to the community
pincot's 1 Ifagazine.

## iron in the future.

It is fortunate that we attended to our own interesst in our own way, and that we ara now
in a position to go ahead to any required ex. tent in th iron trale. As we export locomotives to Russia and Germany, so we expect in
duc time to export iron to \&ll Enrope we now do corton and provisions. Wo bhall nut rest satistified until we do this; for wien that point is reached the great contest will be
ended and American iron will bo master of He fiedd as clearly as American cotton mow of It is not the increase of the breculsulff exports in that line Linusia, Germany and the Moditerranial coutries are our hermidatie rivals.
But we stould louild iron iworks all over the Northwest, thann wheatini iron, and instead West. of mananfactures in these Sintes thus : Ohio,

 And all this rests nyon tho remarkubleg gruwth and prosperity oi the Western Iron nasuufac-
ure, as is secu in the fact thut tho largest in.

## vermicular prowess

Quita a large number of pertons were jober
orday morning assembled at the De Grootit House, in Fourth avenue, to witness the feedarg of a boa-constrictor belonging to Mr.
Parks. The animal had had nothing to eat over two weeks, and was consequently in
condition of hunger which served to make a condition of hunger which served to make box with a glass top, placed directly in front heat reminding it to some sraall extent of ite native African climate. When this bor was cover raised, the lentrity of the room and the seven feet long-slowly crawed, around the in-
terior, his neck hardly thicker than a wrist, and the rest of the bodj comparativaly attenuated. In one corner of the apartment bits, nibbling and munching their food totalty nconscious of their approaching fate. The
largest of theso was first given to the suake. Still slowly crawling, the thin neek kept constantly moving around tho box;- while the rab bit cowered as though dreading he knew not hat. Soon the snake saw him. Gathering rike. Just then the waited for a chaned his head and approached, as he had several times done保e, to touch the snake'd head. The small n and out like a whip-thong, and in an inow the motion, the reptile caught himuld folnose. At the same moment the long, slim fodys. Tightening quickly, the skin of the
folds. snake become rough and corrugated; it glist-

