

The relative position of the heavenly bodies as seen through a telescope, are marked by fine lines of wire that cross each other at right angles. It is necessary that these lines should be exceedingly fine, otherwise being magnified by the eye-glass, they would have an apparent thickness that would render them inapplicable for the purpose. The spider's web was formerly used, but as the power of the glasses was very much increased, these were found to be too coarse.

In the early part of the present century, Dr. Wollaston succeeded in obtaining wire for this purpose, that did not exceed the 10,000th of an inch in diameter. It is said that a quantity of this wire equal in bulk to a common rifle ball, would reach from New York to New Orleans. This wire is made of platinum, and the process by which it is made is very ingenious. The Doctor had platinum wire drawn out as fine as possible, then drawn through the axis of a small tube into which melted silver was poured. The silver and platinum now form one wire; which was again drawn out as fine as possible. This was next put into nitric acid which dissolved away the silver but left the platinum wire so fine that it could not be seen with the naked eye.

The organized worlds afford still more striking evidence of the extreme divisibility of matter.

The blood which flows in the veins of animals, is not, as it appears to be, a uniform fluid, but is composed of small red globules floating in a transparent fluid called serum. In human species the diameter of these globules is about the 4,000th of an inch, and consequently in a drop of blood that would hang suspended from the point of a fine cambric needle, there would be no less than a million of these globules. But animalcules have been discovered that are smaller than these globules; if these have globules of blood that bear the same proportion to the size of their bodies as the globules of our blood, do to the size of our bodies, by what process of calculation shall we arrive at numbers sufficiently expressive to convey an accurate idea of the minuteness of these globules?

From an Address of Prof. Simpson's of Edinburgh.

#### DR. WONG FUN—THE CHINESE.

"There are among the strangers and sojourners at our university this year some graduates who do not belong even to the same section of the great family of man as we ourselves do.

"We have all of us, for example, rejoiced on this occasion to welcome here to the *'summi honores medicinae'*, one who has come to study medicine from a distance of some 15,000 or 20,000 miles; from a kingdom the most marvellous in the world,—a kingdom which at this present hour, contains within its enchanted wall one whole third of the living human race,—from a community that has remained in nearly the same state of strange stereotyped civilization for the last twenty or thirty centuries, and that knew of the mariner's compass, and small-pox inoculation, long, long before these great truths were dreamed of by the learned in Europe,—from an empire that was comparatively advanced in useful arts and sciences, and in medicine among the others, in those far distant times, when Julius Caesar first invaded Britain, and when our rude and savage ancestors in these islands were still tattooing their skins with woad, and offering up human sacrifices at the stones of the Druids.

"The high station which Dr. Wong Fun has won for himself among you as a most meritorious and

modest student, and the high prizes and honors which he has carried off when he descended with you into the arena of competition in the class-room, afford us every hope that he, the first Chinese, I believe, who has ever graduated at a European university, will form, among his countrymen, a most able representative of the medical arts and sciences of the Western world. I am sure that all of us, professors and graduates, do feel an additional interest in his future career and welfare, seeing that he returns to his own distant home, not as a physician merely, but also, I believe, as a Christian medical missionary; seeing that he carries back with him, not merely a full knowledge of modern European medical science, but carries back with him also—like other messengers of yore out of the East—'glad tidings of great joy,' to scatter among his three hundred millions of countrymen. And may God, in his providence, protect and prosper him in his mighty and magnificent mission."

#### A DYING MAN TO HIS FRIEND.

Lavater mentions the last visit he paid to his most intimate friend. All present having left the room, the dying man said, "Let me tell you, in a few words, that I have not led the life of a Christian.—I have been a hypocrite—not what the world calls a hypocrite; but I have not been a Christian. And I trust you will thank me in the next world for this wound I must inflict on your heart. We have not been Christian friends. The love of Jesus has not dwelt in us. Our friendship was not founded on him. How many hundred hours of our short life have we killed by useless conversation, with plans of ambition! What the world calls noble ambition is abominable in the sight of God, an ever-destroying poison to the soul; a bane to all virtue; a hell to the heart which perceives it, when at the gates of death, it begins to be sensible of the eternity of God, of Christ's unspeakable majesty, and his incomparable humility. O my friend! That passion has caused me a thousand tears of unutterable grief. Unspeakably have I been afflicted by every impulse of that monster, now I am on the brink of eternity! O how very true are those words of my Saviour, 'Whoever shall exalt himself shall be abased.' Jesus Christ was humility itself. It is enough that the disciple be as his Lord. O friend! heaven and earth shall pass away, but not the words of Christ. How my best actions dwindle away on the brink of the grave! How horribly are my faults and foibles, which I formerly thought little, towering up! Alas! how little do we know ourselves, though the bustle of life be ever so gentle! O how dreadful is the stillness of death! How terrible the heavy load of our own heart! Creator! Father! What name shall I give to thy mercy which will forgive forever those enormous acts of thoughtlessness, and destroy, through Jesus Christ, all the bad consequences they produced to me and others? Thou art—yes! Thou art Love."

From Zion's Herald.

#### AM I CALLED TO PREACH?

Am I called to preach the Gospel? How weighty and momentous a question is this!—How often it steals unbidden into the desponding pastor's heart; as if questioning his right to stand in presence of the world as Christ's ambassador! And how painfully it sounds in the soul of the young man, who is in doubt concerning his duty. What a tempest of feelings—of conflicting hopes and fears, of desires and antipathies—it arouses in his breast!