plant which requires higher priced coal, it is much cheaper than any other gas.

As has been said, a non-luminous gas is better adapted for heating purposes than illuminating gas. Yet, in most cases where this gas is used for fuel, it would be very convenient at times to obtain light from it. This result seems in a fair way to be accomplished, practically, by the use of an incandescent burner, in which a refractory material, unaltered in the air at a white heat, is heated to vivid incandescence by the non-luminous flame of fuel gas, thus yielding a much whiter and steadier light than ordinary illuminating gas.

Should this burner fulfill its present promise, this cheap gas will doubtless be extensively distributed in the cities for both heat and light; while it is not improbable that isolated plants may be widely used to heat and light large buildings, or small groups of buildings.

THE USE OF THE IMAGINATION IN STUDY.

The imagination vitalizes whatever we study. A fact or a definition is barren until the imagination transforms and pictures it for us as a glowing thought or emotion. Learning that nourishes the mind, and gives emotion and aspiration, can only be had through the transforming power of the imagination. We are apt to think that it is the faculty of the poet only. To every student, and to him with a longing to become a student, I wish to declare that this is a fatal mistake.

There can be no worthy scholarship in any line of study without the constant suffusing power of this faculty. Food without digestion is scarcely less useful to the body. True, formulas may be learned by rote that will be of service in various walks of life—just as a hoe or spade is serviceable—but such knowledge is not education, for even the bee and the beaver learn well to perform a certain daily routine of labor. Milton's noble conception of education is: "The light we have gained was given us not to be ever staring on, but by it to discover other and onward things more remote from our knowledge." But no light is gained, in gaining knowlege, until it is vitalized and fused by our imagination or spiritual forces. Even mathematics which has ever been regarded as one of the dryest subjects in the college curriculum, may have its "dry bones" warmed into life by being breathed upon by the imagination. Simple germinal principles in its warmth are realized as the source of pregnant laws which control the minutest and the greatest objects and phenomena.

A few primary definitions and fundamental theorems, for instance, lead by constantly ascending steps to the determination of the areas and volumes of all magnitudes, whether those of plane geometry or the infinite number of those expressed by the higher and transcendental equation, as the cycloids or spirals. But this harmony of procession clearly reveals itself only to that student, who frequently forgetting himself in thought, bends "a pinion for the deeper sky."

"Watch narrowly
The demonstration of a truth, its birth,
And you trace back the influence to its spring
And source within us, where broods radiance vast,
To be elicted ray by ray."

The oftener the student shall free himself from the fetters of the text, and brooding in imagination upon what he has learned, till it becomes pictured in his mind symmetrical in form and parts, (as the statue in the sculptor's thought e'er his chisel strikes a blow), the more clear and perfect will his perception be, and the more the "imprisoned splendor" of the thought will come to view. It is only when science, in any of its numerous departments, is approached thus with the "open vision" of the imagination that it blooms and blossoms for us; otherwise approached it is a desert of dry and unrelated facts.

It is because of this spiritual and imaginative faculty that poetry has been the most enduring and pervading influence in the world. This is why Homer sings to day in men's ears the