

The

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Forge Review

EDITOR'S NOTE

With the birth of a new year, Debbie and I would like to thank everyone for their support of this newsletter. Financially the Forge Review has reached its goal of being able of not only producing the newsletter, but financially supporting the blacksmith get-togethers and there related cost. We realized this last year the need for an assistant editor. The function would be to help gather articles and to help represent the Forge Review at any blacksmithing functions, should we not be able to attend, if possible. If you feel you could fill this position, please contact us soon. Happy New Year!!!

Don & Debbie

FUNCTION OF A FENCE GATE IS IN THE EYE OF THE BEHOLDER

copied from the Independent Press Service, by Margo Miller

Ask an architect or landscape designer about the function of a gate and they wax positively lyrical. In relation to its fence, a gate is not just the buckle on the belt, or the clasp on the necklace, but if you quiz architect Bradley Cutler, "the eye or mouth of the property."

A gate "announces the entrance," says Lee Childs of Brown & Rowe, a Boston landscape design firm. "It's the first representative of the owner that the public (or a guest) sees."

So a gate is an opening. It's also a barrier, sometimes solid and sometimes not; and, says Childs, it tells people that they are moving from a public, or general space into something private or restricted or specialized.

From time immemorial, we have known the power of the gate. The ancient Greeks believed dreams entered us through gates, false dreams through an ivory gate and true dreams through a gate of horn. The Old Testament "gate of justice" was the place of judicial assembly and the Great Gate of the Turk was the seat of the sultan's government. Paradise and hell have gates; since C.F. Alexander's hymn of 1853 "The Roseate Hues" we've sung about the "pearly gates of heaven."

And yet there are thousands of us who want a gate with fists, a gate that protects and guards our house, a gate that excludes, a gate whose chain link mesh says that to enter without our invitation is to invite the attentions of a Fido as mean as the junkyard dog. Chain-link gates are everywhere.

Chain link, according to design experts, has the appeal of looking strong but open. "Something there is that doesn't love a wall," observes Robert Frost's poem. A wall, or fence, that is perceived as forbidding, ugly or somehow "offensive" will soon be defaced, says Lee Childs. The same holds true for gates. Hence the appeal of chain link's rich cousin, wrought iron.

This is a most gracious material for gates and fences. Wrought iron gates combine wonderfully with brick, stone and cement, and with hedges. But not all these gates are intended to open and close. In fact, the more institutional the setting the less likely a wrought iron gate will swing gaily on its hinges.

As house gates, wrought iron can be very simple, the metal very lightly sketching the entrance. And yet what a glorious thing is the gate that has erupted into black metal foliage or sable scrolls and arabesques.

Although wooden gates can be as formal and elaborate as wrought iron, wood is by far the most homey material for fencing. Say "picket fence" and we think of an America that didn't need gates. Domesticated and small town, this was the America of Wallace Nutting's hand-tinted photographs. Oh, the white picket fence might have had a gate, but it was left invitingly ajar. ("When is a gate not a gate?" to paraphrase the child's riddle. "When it is ajar!")

Thanks to Joe Pehoski for sending in this article!

SPECIAL ARTICLE

BLACKSMITHING AND GEOMETRIC PRINCIPLES

In determining the amount of stock required to make a forged part of specific shape, any change in the density of the metal during a forging operation may be disregarded, since it is too small to consider for all practical purposes. Therefore, the volume of the metal before forging is essentially the same as that after forging, and it must be predetermined before the operation. Such volume may be computed by geometric principles.

Example: Suppose a 3-inch diameter steel bar is heated and forged by upsetting into a circular disk having a diameter of 8 inches and a thickness of 2 inches. What length of bar is required?

Solution: First, find the volume of the disk. The disk is really a cylinder, and the volume of a cylinder is found by multiplying the area of its base by its altitude. The base area is calculated by the formula $A = \pi r^2$ where A equals area, π equals 3.1416 and r^2 equals radius squared.

$$A = 3.1416 \times 4^2$$

$$A = 31416 \times 16$$

$$A = 50.27 \text{ square inches}$$

The altitude (height) is 2 inches. Then $50.27 \times 2 = 100.54$ cubic inches, which is the volume of the disk.

Next, find the volume of a length of the rod 1 inch long.

The rod is also a cylinder and the same procedure can be followed in finding the volume of a piece 1 inch long.

$$A = 3.1416 \times 1.5^2 \text{ (radius is } \frac{1}{2} \text{ of diameter)}$$

$$A = 3.1416 \times 2.25$$

$$A = 7.07 \text{ square inches}$$

someday, go to the forge and anvil and see how creative you can be, if nothing else, it is great for beating out all your frustrations and you will feel like a new woman!!!

By Debbie Morelock