Examples: As 305 days on A is to $6.40 on F, so is 10 as a 100 days on A to $1.75 on F, and so is 10 on A, as 1 day, to $1.75 on F, and so is 10 as 10 days on A to 17½ cents on F, and so is 20 days on A to 35 cents on F, and so is 60 days on A to 105 cents on F, and 64 days on A to $1.12 on F.

RULE.—When the amount to be divided is less than the number of days in the year, take 365 on F and bring it in contact with the perpendicular of the amount to be divided on A. The days on F will cut dollars and cents on A, viz., as 365 on F is to $3 or 300 cents on A, so is 10 days on F to 8 cents on A, or a 100 on F to 80 cents on A, &c., &c.

We have here selected 8 per cent. to retain the position of index, any other rate is equally simple.

To find the superficial content of a board or plank, the length in feet, and breadth in inches being given:

RULE.—When the breadth is more than 12 inches, take it on F and bring it in contact with the perpendicular of 12. The gauge point on A. Then the perpendicular of any length on A will cut the superficial content or answer on F. (The index 100 on perpendicular of 80 on A).

Examples: Require the superficial content in square feet of a board 15 inches wide and 20 feet long.

As 12 inches, the guage point on A, is to 15 inches on F, so is the length 20 feet on A to 25 feet on F, and so is any length on A to content on F.

The operator cannot fail to see that any breadth on F may be brought in contact with 12, the guage point on A, and may take any length on A.

When the breadth is less than 12 inches:

RULE II.—Bring the 12 on F or index in contact with the breadth on A. Then any length on F will cut the perpendicular of the answer on A. In this position, 12 on F cuts 96 inches on A.

Then as 12 on F : 96 inches on A : : 20 feet on F : 16 feet on A.

NOTE.—Here the operator cannot fail to see that 12 on F may be brought in contact with any breadth less than 12 on A.

To find the solid contents of a piece of square timber, whose sides are 15 inches deep and 20 feet in length:

RULE I.—Proceed as if one side were a board, then repeat the operation, using the result or superficial contents of one side as length in the second operation. This last result is the solid or cubic contents or answer.

Example: As 12 on A is to 15 inches on F, so is 20 feet on A to 25 on F, and so 25 feet on A will give 31¼ solid feet on F.—Ans.

RULE II.—When the depth of side is less than 12 inches, use Rule II. for board measure and repeat—without changing index —the operation as before.

When it will be as 12 on F is to 9.6 on A, so is 20 on F to 16 feet on A—: and so is 16 feet on F to 12.75 on A—the answer. Any depth in inches may be brought in contact with 12 on A or B.

When timber is unequal sided: Rule—Bring the depth of one side to the 12 on A or F, as the case may be; find and note the result. Then bring the depth of the other side to 12 as before, using this last result as length in the next operation. The result will be the cubic content or answer.

To find the cubic content of round timber, the length and diameter being given:

RULE.—Proceed as in the case for square timber, using the diameter as if it were the depth of a side. Find and note the result. Then move the index to between the perpendicular of 78 and 79—nearest to 79—then the aforesaid result taken on index will give the cubic content on A. Note that, while the index is in this position, the square of any diameter taken on index will give the area of such circle on A, &c., &c.

To find the number of acres in a plot or piece of ground, the dimensions being given in rods:

As an acre contains 160 rods—the 16th division on A may be assumed as a 160 or guage-point. In this position of F, we find the 16th division.—As 160 on A cuts 20—as 20 rods on F for one side of field or piece of land: then as 160 rods on A is to 20 rods on F, so is 20 rods on A to 25 acres on F, and so is 30 rods on A to 3.75 acres on F, and while the index is in this position, any length on A is to acres and tenths on F—a tenth = 16 rods.

When the dimensions are given in links:

RULE.—As 100,000 links are contained in a acre, the 100 on F or the 100 on side B may readily be assumed as 100,000 links. In this position of F, 100 on it cuts 80 on A. Then as a 100,000 links on F is to 80 links on A, so 80 links F to ·004 of an acre on A or 10.24 rods; and as 100,000 links on F is to 800 links on A, so is 80 links on F to ·04 on A = to 102.4 rods, and as 100,000 links on F is to 800 links on A, so is 800 links on F to 6.4 acres on A—and so is any number of links on F to acres and fractions of

acres on A. When the dimensions are given in chains, 10 square chains make an acre. The 100 on F assumed as 10. Then is 10 chains on F is to 8 chains on A, so is 8 chains on F to 6.4 acres on A; and as 10 chains on F is to 80 chains on A, so is 80 chains on F to 640 acres on A, and so is any number of chains on F to acres and fractions on A.

To find the area in acres, &c., of a triangular field, two sides and the contained angle being given:

RULE.—Set the index to the given angle on arc. Take the greater side on A, the less side on F. A perpendicular will be found ready reckoned on B, from the end of the less side on F, to fall at right-angles on A. Half that perpendicular, multiplied by the base, will by the foregoing rules give the area.

CORRESPONDENCE.

FEMALE TEACHING.

THERE is a disposition to undervalue female teaching. To get a male teacher is a first consideration; if this cannot be, if the people are poor and humble, and if the trials that arise from such causes are to be endured, then only the people can think of a female teacher. Have the friends of right, and the keen discrimination of providential arrangements, considered these conclusions? What place does the women occupy in the family? Who does not know that in the most important institution in the world, *Home,* woman's mind is the governing power? Who does not know that all minds receive the first training, the first direction, the first noble, generous pulsation of future ambition, under the moulding and elevating authority of the female? Take from our homes this female training; take from society, generally, this element, and what are our homes or what our country? There is a part of the great system of instruction in which woman towers immensely above man. The teacher's office is specially suited to women—who are natural educators. The question is often asked, Why this disparity in the number of the sexes who teach? The answer is obvious. Females in far larger proportions are suited to the work, and from a consciousness of their adaptation to it continue to teach and love the profession, while by far the greater number of males, conscious of their want of adaptation to the work they have assumed—not chosen—quit the profession for something more genial. The disparity between the salaries of male and female teachers, must often arrest the attention of thinking persons. When it is stated that, for the same labor, females receive less pay, though that labor may be as well, if not better, performed, we are compelled to feel that an aspersion is cast upon our sex, from which our past history and present influence ought to save us, and if it has any meaning at all, is a sad commentary upon the chivalry and gallantry of our countrymen.

Much of the work that is done in our school-rooms, is done better by women, simply because, from the constitution given by the All-wise Creator, she is better adapted to do it, and it would be well for the school system of our land, if the field of female labor, as teachers, were enlarged. I am quite sure that many of our County Academies and Superior Schools would receive a new and upward impulse if some of our active, energetic female teachers were placed over them. In other places, experiments in this direction have been made with eminent satisfaction. But, in any case, I contend that when the same work is done by females, and done well, they should have the same pay—anything short of this is unfair and unjust, for in the influence woman has exercised, she has assuredly won for herself this consideration. Her supremacy as teacher in the United States is felt and confessed in every State. It is growing in the parent country, and in this our native Province it is so apparent that we may justly draw the notice of the Government to the fact above stated, and inquire why, when we do the same work, and do it well, we should not receive the same generous consideration for our toil and influence in the great educational field.

These reflections have long been in my mind, and I had hoped to see some of the stronger sex find this same train of thought and present them to view. As yet I have waited in vain. And now, though it is incongenial to my feelings, I send them, asking that they may have some spare corner of your excellent Journal, and by giving them such a place you will much oblige

A FEMALE TEACHER.