A CliffordBasic calculation of the strain portion of the stress tensor, and an explicit demonstration that it is symmetric.

```
<< CliffordBasic`;
$SetSignature = {3, 0};

ClearAll[eta, epsilon, e1, e2, e3, h1, h2, h3, f, t1, t2, t3, t]
f = e1 e[1] + e2 e[2] + e3 e[3] +
  eta GeometricProduct[e[1, 2, 3], h1 e[1] + h2 e[2] + h3 e[3]]

t1 = Grade[epsilon GeometricProduct[f, e[1], Turn[f]] / 2, 1];
t2 = Grade[ epsilon GeometricProduct[f, e[2], Turn[f]] / 2, 1];
t3 = Grade[ epsilon GeometricProduct[f, e[3], Turn[f]] / 2, 1];

t = {{ScalarProduct[t1, e[1]], ScalarProduct[t1, e[2]], ScalarProduct[t1, e[3]]},
   {ScalarProduct[t2, e[1]], ScalarProduct[t2, e[2]], ScalarProduct[t2, e[3]]},
   {ScalarProduct[t3, e[1]], ScalarProduct[t3, e[2]], ScalarProduct[t3, e[3]]}};
(*t // FullForm*)

format = {epsilon → ϵ, eta → η, e1 → "E₁",
   e2 → "E₂", e3 → "E₃", h1 → "H₁", h2 → "H₂", h3 → "H₃"};
t /. format // MatrixForm

Transpose[t] - t
```

```
e1 e[1] + e2 e[2] + e3 e[3] + eta (h3 e[1, 2] - h2 e[1, 3] + h1 e[2, 3])
```

$$\begin{pmatrix} \frac{E_1^2 \epsilon}{2} - \frac{E_2^2 \epsilon}{2} - \frac{E_3^2 \epsilon}{2} + \frac{1}{2} H_1^2 \epsilon \eta^2 - \frac{1}{2} H_2^2 \epsilon \eta^2 - \frac{1}{2} H_3^2 \epsilon \eta^2 & E_1 E_2 \epsilon + H_1 H_2 \epsilon \eta^2 \\ E_1 E_2 \epsilon + H_1 H_2 \epsilon \eta^2 & -\frac{E_1^2 \epsilon}{2} + \frac{E_2^2 \epsilon}{2} - \frac{E_3^2 \epsilon}{2} - \frac{1}{2} H_1^2 \epsilon \eta^2 + \frac{1}{2} H_2^2 \epsilon \eta^2 - \frac{1}{2} \\ E_1 E_3 \epsilon + H_1 H_3 \epsilon \eta^2 & E_2 E_3 \epsilon + H_2 H_3 \epsilon \eta^2 \end{pmatrix}$$

```
{{0, 0, 0}, {0, 0, 0}, {0, 0, 0}}
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