## MatchData#values_at should support named capture

Using `((MatchData#[]))`, we can access a named capture by its name.

```
/(?...)/.match("foo")[:a] #=> "foo"
/(?...)/.match("foo")["a"] #=> "foo"
```

But `((MatchData#values_at))` accepts only Integer and refuses Symbol or String.

```
/(?...)/.match("foo").values_at(:a) # I expected it returns ["foo"], but...
 #=> in 'values_at': no implicit conversion of Symbol into Integer (TypeError)
/(?...)/.match("foo").values_at("a") #=> in 'values_at': no implicit conversion of String into Integer (TypeError)
```

(These are tested in ruby 2.1.0dev (2013-11-28 trunk 43903) [i686-linux].)

I think `((MatchData#values_at))` should work along with `((MatchData#[]))` as follows:

```
/(?...)/.match("foo").values_at(:a) #=> ["foo"]
/(?...)/.match("foo").values_at("a") #=> ["foo"]
```

In the patch, `((match_entry))` is removed because it is no longer used. Comments and code are based on `((rb_hash_values_at))` in hash.c. It passes `((make test-all))` except `((TestGc#test_gc_reason))`, which fails also on the original version.

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### Associated revisions

Revision 92f8d74a - 05/17/2016 05:10 PM - naruse (Yui NARUSE)

- re.c (match_values_at): MatchData#values_at supports named captures
  [Feature #9179]

- re.c (namev_to_backref_number): separeted.

Revision 55036 - 05/17/2016 05:10 PM - naruse (Yui NARUSE)

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Revision 55036 - 05/17/2016 05:10 PM - naruse (Yui NARUSE)
I want to write following code, how do you think matz?

```ruby
reg = %r<\A(?<scheme>[A-Za-z][+-.0-9A-Za-z]*):(?<hier-part>//(?<authority>[^/\?#]+)(?<path-absolute>/[^?#]*)|[^/?#]+|[^/?#]*)(?:<query>[^#]*))?(?:#(?<fragment>.*))?\z>
url = "http://example.com/hoge?foo=Bar#frag"
reg =~ url
p $~.values_at(:scheme, :authority, :"path-absolute", :query, :fragment)
```

**Revision 55036 - 05/17/2016 05:10 PM - naruse (Yui NARUSE)**

- Feature #9179
- re.c (match_values_at): MatchData#values_at supports named captures
- re.c (namev_to_backref_number): separated.

**History**

#1 - 11/05/2014 09:45 AM - naruse (Yui NARUSE)
- Status changed from Open to Assigned
- Assignee set to matz (Yukihiro Matsumoto)

I want to write following code, how do you think matz?

```ruby
reg = %r<\A(?<scheme>[A-Za-z][+-.0-9A-Za-z]*):(?<hier-part>//(?<authority>[^/\?#]+)(?<path-absolute>/[^?#]*)|[^/?#]+|[^/?#]*)(?:<query>[^#]*))?(?:#(?<fragment>.*))?\z>
url = "http://example.com/hoge?foo=Bar#frag"
reg =~ url
p $~.values_at(:scheme, :authority, :"path-absolute", :query, :fragment)
```

#2 - 05/17/2016 05:10 PM - naruse (Yui NARUSE)
- Status changed from Assigned to Closed

Applied in changeset r55036.

**Files**

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<th>11/29/2013</th>
<th>vzvu3k6k (vzvu3k6k __)</th>
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